Qsee®
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# User Manual

## MODEL QT428

## MODEL QT426

QT4 Series
H.264 NETWORK DVR

## *Thank You for Choosing a Q-See Product!*

All of our products are backed by a conditional service warranty covering all hardware for 12 months from the date of purchase. Additionally, our products also come with a free exchange policy that covers all manufacturing defects for one month from the date of purchase. Permanent upgrading service is provided for the software and is available at www.Q-See.com.

Be certain to make the most of your warranty by completing the registration form online. In addition to warranty and technical support benefits, you'll receive notifications of product updates along with free downloadable firmware updates for your DVR. Register today at www.Q-See.com!

Please see the back of this manual for exclusions.

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Manufacturer shall not be liable for any damages whatsoever from misuse of this product.



# About this Manual

This manual is written for the QT4 family of DVRs. Not all features and capabilities are shared across all models so you may see features described which are not applicable or available on your machine. In addition you may see screen images that do not exactly match those on your display.

This manual was accurate at the time it was completed. However, because of our ongoing effort to constantly improve our products, additional features and functions may have been added since that time and on-screen displays may change. We encourage you to visit our website at www.Q-see.com to check for the latest firmware updates and product announcements.

Throughout the manual we have highlighted warnings and other important information that will assist you in operating your new system in a safe and trouble-free manner. Please take the time to read and follow all instructions and pay attention to alerts as shown below:

**IMPORTANT!** Red boxes with this icon indicate warnings. To prevent possible injury or damage to the product, read all warnings before use.

**NOTE!** Text in blue boxes with the Information icon offer additional guidance and explanations about how to make the most out of your system.

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# FOR YOUR SAFETY

CHAPTER 1

To prevent damage to your Q-See product or injury to yourself or to others, read and understand the following safety precautions in their entirety before installing or using this equipment. Keep these safety instructions where all those who use the product will read them.

**WARNING! ELECTRIC SHOCK RISK!**

- Check the unit and any accessories included in the package immediately after opening. If items are missing or damaged, repackage and return to the point of purchase.
- Use the proper power source. Only use the power adapter supplied with your system. Do not use this product with a power source that applies more than the specified voltage (100-240V AC).
- Never insert anything metallic into the DVR. Inserting anything into the DVR or its case can be a source of dangerous electric shock.
- Do not operate in dusty areas. Avoid placing the DVR in places that are dusty.
- Do not expose this product to rain or use near water. If this product accidentally gets wet, unplug it and contact an authorized dealer immediately.
- Keep product surfaces clean and dry. To clean the outside case of the DVR, gently wipe using a lightly dampened cloth (only use water, do not use solvents).
- Do not operate this DVR without the cover securely in place. Do not attempt to do any repairs to the DVR yourself. If there are unusual sounds or smells coming from the DVR, unplug it immediately and contact Q-See technical support. Under no circumstances should the cover be removed while the device is connected to a power source. You should only remove the cover to install/replace the hard disk drive (**See Chapter 9**) or replace the standard 3v lithium cell battery on the motherboard. These are the only user serviceable parts. You may need to replace the battery if the internal clock resets itself after a power outage
- Handle DVR box carefully. If you accidentally drop your DVR on any hard surface, it may cause a malfunction. If the DVR doesn't work properly due to physical damage, contact an authorized dealer for repair or exchange.
- Make sure there is proper air circulation around the unit. This DVR system uses a hard drive for video storage which generates heat during operation. Do not block air holes located on the bottom, top, sides and back of the DVR as they are designed to keep the system cool while running. Install or place this product in an area where there is ample air circulation.
- Provide proper ventilation. This DVR has a built-in fan that properly ventilates the system. Do not cover or impede this fan.

# INTRODUCTION CHAPTER 2

This DVR uses high-performance video processing chips and an embedded Linux operating system for quality image recording and ease of use. It utilizes numerous advanced technologies including the industry-standard H.264 codec to deliver high-quality, smooth videos and dual stream capability for remote viewing. A SATA hard-drive interface offers upgradability and VGA output allows users to connect to any standard TV or monitor for viewing.

Local control of the system utilizes a mouse and graphical user interface (GUI) as well as a remote control. Users can also remotely monitor and control their system using a web browser or select mobile device.

This DVR uses cutting-edge technology without compromising stability and reliability making it ideal for home use as well as in warehouse, factory, retail and other similar environments.

## MAIN FEATURES

### COMPRESSION FORMAT

Standard H.264 compression with low bit rate and high image quality

### LIVE SURVEILLANCE

Supports HD VGA output

Supports channel security by hiding live display

Displays the local record state and basic information

Supports full control with USB mouse

Supports digital zoom on live and playback view

### RECORDING MEDIA

Supports one SATA HDD up to 2TB to record for a long time periods.

### BACKUP

Supports backing up to USB 2.0 devices

Supports saving recorded files with AVI format to a remote computer through internet

### RECORDING & PLAYBACK

Record modes: Manual, Schedule, Motion detection and Sensor alarm recording

Supports recycle after HDD is full

Resolution, frame rate and picture quality are adjustable

128MB for every video file packaging

4 audio channels available

Two record search modes: time search and event search

Supports multi-screen simultanious playback

Supports deleting and locking the recorded files one by one

Supports remote playback in Network Client through LAN or internet

Supports recording in CIF and D1 resolutions.



### ALARM

1 channel alarm output and up to 16-channel (depending on model ) alarm input available

Supports scheduling for motion detection and sensor alarm

Supports pre-recording and post recording

Supports linked channels recording once motion or alarm is triggered on designated channel

Supports linked PTZ preset, auto cruise and track of the corresponding channel

### PTZ CONTROL

Supports multiple PTZ protocols (PelcoP, PelcoD, LILIN, MINKING, NEON, STAR, VIDO, DSCP, VISCA, and RANGE)

Supports 128 PTZ presets and 8 auto cruise tracks

Supports remote PTZ control through internet

### SECURITY

Customize user rights: log search, system setup, two way audio, file management, disk management, remote login, live view, manual record, playback, PTZ control and remote live view

Supports 1 administrator and 15 users.

Supports event log recording and checking, events unlimited

### NETWORK

Supports TCP/IP, DHCP, PPPoE, DDNS protocols

Supports IE browser to do remote viewing

Supports a maximum of 10 user connections simultaneously

Supports dual stream. Network stream is adjustable independently to fit the network bandwidth and environment.

Supports picture snap and color adjustment in remote live view

Supports remote time and event search, and channel playback with picture snap

Supports remote PTZ control with preset and auto cruise

Supports remote full menu setup, changing all the DVR parameters remotely

Supports mobile surveillance by smart phones, Win Mobile Pro, Symbian, and iPhones, iPads, Android, and Blackberry on 3G networks

Supports CMS to manage multiple devices on the internet

Administrator can limit user access to specific cameras

Administrator can disconnect online users

**NOTE!** Depending on your point of purchase, your DVR will have the hard disk drive already installed. If your drive was packaged separately or if you wish to upgrade to up to a 2TB drive, please see Chapter 9 at the back of this manual which covers installing the drive.

# BASIC FUNCTIONS CHAPTER 3

## 3.1 POWER ON/OFF

Before turning on the DVR, ensure that all connections are good.

### POWER ON

Connect the power supply and the DVR will power up. The blue LED power indicator on the front will illuminate and an on-screen **WIZARD** dialogue box will open allowing the user to set up the time and time zone.

PICTURE 3-1

If the DVR displays the live image or doesn't display the menu on start up, the menu can be brought up by pressing the **ESC** button on the DVR or the **MENU** button on the remote control.

### POWER OFF

The DVR will power down to a standby mode when the **POWER** button on the remote control is pressed, or when the **SYSTEM SHUT DOWN** icon is selected from within the **MENU**. In both cases, the **SHUT DOWN** window will appear and users must select **OK** to confirm. The hard drive will stop spinning and the system will shut down. For extended periods of inactivity, it is recommended that the DVR be disconnected from power either by turning off the power at the surge protector or unplugging the device.



## 3.2 LIVE VIEWING AND RECORDING

The normal mode of the DVR is to display the live feed from the cameras. Configuring which channels will be displayed, naming the cameras and other display settings will be covered in **SECTION 4.3**.

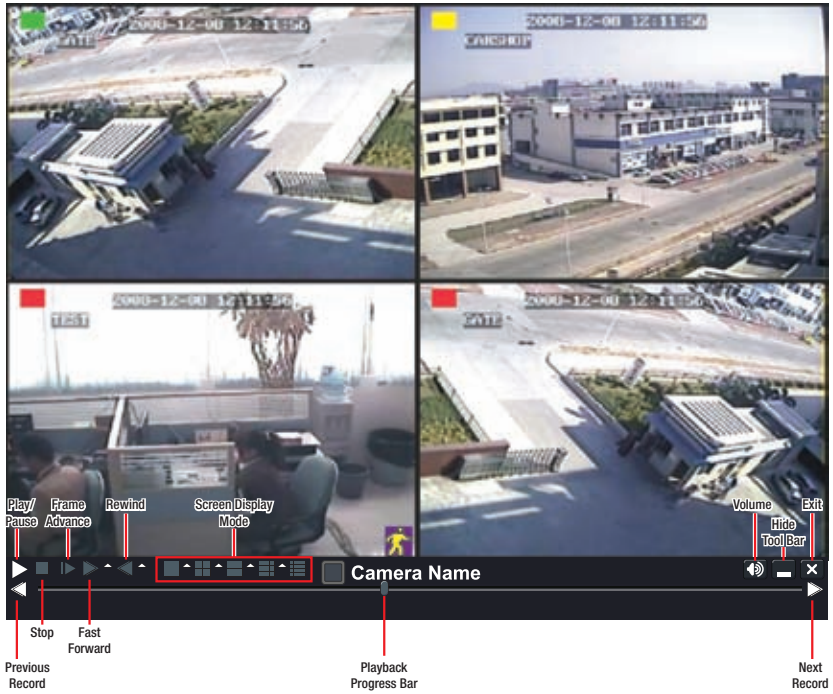
In addition to the camera images, the DVR will display symbols regarding the status of each camera.

PICTURE 3-2

| Symbol | Meaning | Symbol | Meaning |
|---|---|---|---|
| | Recording Manually or on Schedule | | Alarm Recording |
| | Motion Detection Recording | | Motion Event |

## 3.3 LIVE PLAYBACK

Pushing the playback buttons on the DVR or remote will enable you to play back what has been recorded. A toolbar will appear below the display allowing control via mouse as well.




PICTURE 3-3

# MAIN MENU SETUP

CHAPTER 4

## 4.1 BASIC CONFIGURATION

### LOGIN

Before configuring the system, a user account needs to be created and a user must be logged in. The DVR can be configured to allow multiple users, each with their own level of access and authority. If not logged in, only the multi-screen display can be changed.

When starting for the first time, or when no one is logged into the device, pressing the **MENU** button on the DVR or remote control or right-clicking on the screen with the mouse will bring up the **LOGIN** screen. The default user name and password is ***admin*** and ***123456***. Both are case-sensitive.

For more on adding or deleting users, setting passwords and setting access levels, please see **SECTION 4.8**.

PICTURE 4-1

### CONTROL BAR

When a user is logged in, pressing the **ESC** button on the DVR or right-clicking on the screen with the mouse will display the **CONTROL BAR** on the bottom of the screen.

PICTURE 4-2

Click the icon beside the desired screen display mode to open the **CHANNEL SELECT** menu.

Users can check any or all channels between 1 and 16 to display the live feeds. Click the box to confirm the settings before closing the **CHANNEL SELECT** menu by clicking on the button.

PICTURE 4-3

## MAIN MENU

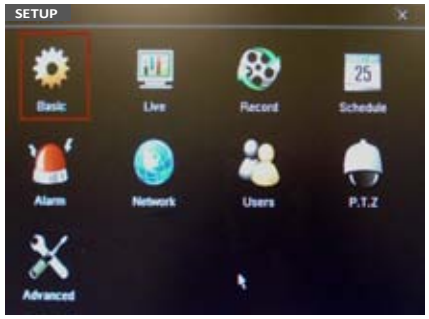
Selecting the **MENU** icon on the left of the **CONTROL BAR** or pressing the **MENU** button on the DVR and remote control open the **MAIN MENU**.

Clicking on any icon will open the relevant menu.

PICTURE 4-4

## SETUP

From the **SETUP** menu select the **BASIC** menu to set device name, date, time and other settings. There are three tabs covering **System**, **Date & Time** and Daylight Savings Time (DST).




PICTURE 4-5

### System Tab

The following settings can be changed in this menu:

**Device Name:** This will display on the client end or CMS. Naming the device will help users recognize the device when monitoring remotely.

**Device ID:** If you have multiple systems, you can give this device a numerical ID.

**Video Format:** Select between NTSC (North America) or PAL (Europe) video standards.

**Password Check:** By enabling this, a user will need to enter name and password when performing configuration operations.

**Show Time:** Displays time in Live View

**Show Wizard:** If this is enabled, a window to reset time and time zone will open upon system restart.

**Max Network Users:** Set the maximum number of network connections - up to 10.

PICTURE 4-6



**VGA Resolution:** Chose the configuration that best fits your monitor. Options are: VGA800*600, VGA1204*768, VGA1280x1024 and CVBS. NOTE: VGA is for VGA monitors while CVBS is for TV monitors connected using a BNC/RCA adaptor. Switching between VGA and CVBS will change the menu output mode. Please be sure to have the correct monitor on hand when changing output mode.

**Language:** Select your preferred menu language.

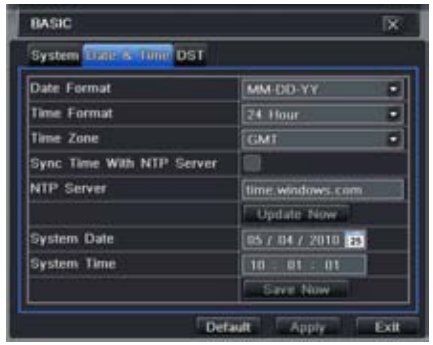
**NOTE!** When configuring your settings, you will always need to click **Apply** to save your current settings before closing the window with **Exit** otherwise your changes will be lost. You may click **Exit** or the close window box (**X**) in the upper right of the window to close without saving changes but an alert will pop up asking if you wish to save changes or not. Click **OK** to save changes or **Cancel** to continue without saving.You may select the **Default** button to restore your settings to those set at the factory.

**IMPORTANT!** After changing the Language or Video Format, the device will need to be restarted.

### Date & Time Tab

Set date, time, time format and related configurations in this menu.

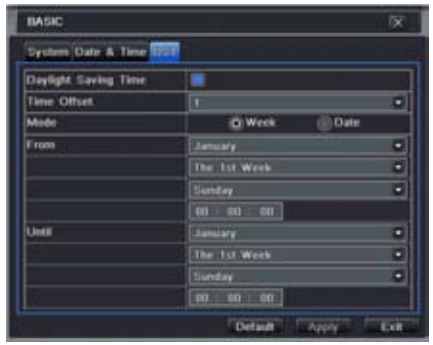
**NTP Server:** Using Network Time Protocol will keep your system's clock current by allowing it to occasionally receive updates from the selected server.




PICTURE 4-7

### DST Tab

Allows your system to adjust for time changes due to Daylight Savings Time.



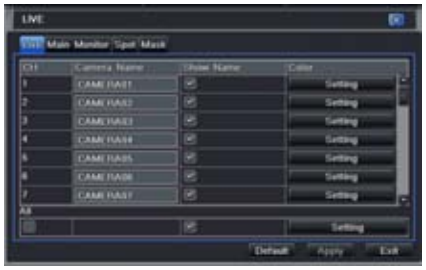

PICTURE 4-8

## 4.2 LIVE CONFIGURATION

Live configuration includes four submenus: **Live**, **Main Monitor**, **Spot** and **Mask**.

### Live Tab

Use this menu to set camera names and adjust picture colors, brightness, hue saturation and contrast for optimal picture results.



PICTURE 4-9

You can individually name cameras by highlighting the field for each camera. A virtual keyboard will appear allowing you to enter characters, numbers and symbols with case sensitivity. **ENTER** will save the name and return to the **LIVE** menu. **ESCAPE** will exit the keyboard without saving.

You can configure the settings for image saturation, hue, brightness, contrast and colors individually by clicking on the **Setting** button for each individual camera or for all of them simultaneously by selecting the All button before making the settings.

PICTURE 4-10

### Main Monitor Tab

Select the configuration of your display.

Split Mode allows you to choose from single view, 2x2, 2x3, 3x3 and 4x4 *(QT426 only)* views on a screen at one time. You can also select which channels will be displayed.

Channels can be grouped and the display will cycle between groups. Any individual channel can be shown in more than one group.

**Dwell Time:** This is the time interval the display will spend showing a group before moving on to the next group.

PICTURE 4-11

**NOTE!** If viewing remotely on a computer with dual monitors, the display must be on the main monitor.



### Spot Tab

This allows select feeds to be viewed on a separate monitor that is connected to the DVR but may be in another room, for example. There will be no menu access on this auxiliary display.

Only one channel can be displayed at a time on this monitor. You can choose which channels (each channel is a “group”), the order and their dwell time. The left and right arrows allow you to move to the next group. A channel can appear in more than one group.

PICTURE 4-12

### Mask Tab

Set up masks on individual cameras to block out select areas on each screen. This is to grant privacy in situations when other users may be able to view the camera feeds and you wish to restrict viewing of certain areas or activities.

Click on the **Setting** button next to a given camera to apply a mask to its view.

PICTURE 4-13

Up to three areas may be masked in an image. Simply click and drag to cover the area. To delete, double-click on a mask.

Right-click to exit the screen, your masks will be saved.

The masks will appear on that channel’s image in the live area as well as on recordings.

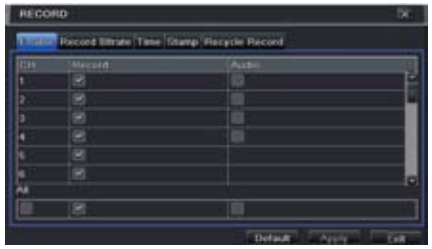
PICTURE 4-14

## 4.3 RECORD CONFIGURATION

Configure the recording settings for your cameras. There are five sets of options; **Enable**, **Record Bitrate**, **Time**, **Stamp** and **Recycle Record**.

### Enable Tab

Select some or all of the cameras to record to the DVR. You can set up to four cameras to record audio in addition to video. You can globally select all the cameras regardless of their individual settings by selecting the **All** box below each column.



PICTURE 4-15

### Record Bitrate Tab

Set up the resolution, quality, encoding, quality and maximum bitrate of the video stream according to your needs. You can set each camera individually, or globally by using the **All** function at the bottom of the window.

PICTURE 4-16

**NOTE!** On the QT426 all cameras must be set to the same recording resolution - either D1 or CIF. On the QT428, each camera can have its resolution set independently of the others as you choose.

| Parameter | Options | What it Means |
|---|---|---|
| Resolution | D1, CIF | D1 = Full TV resolution, CIF = 1/2 D1. D1 takes more room on the hard drive than CIF |
| FPS | 1-30 | Frames per second. More frames makes for smoother video but takes up more room on the hard drive. |
| Encode | VBR, CBR | Variable Bit Rate versus Constant Bit Rate. VBR provides better compression, but issues may arise when streaming for remote viewing. |
| Quality | Lowest – Highest | Only available when VBR is selected. The higher the quality, the more drive space required. |
| Max Bitrate | 256-2084kbps | Your network may not have enough bandwidth to handle maximum rates from all of your cameras. Adjusting these settings to suit your network will improve performance and on-screen image quality. |



### Time Tab

You can set the length of time the DVRs record an event before and after a motion detection or alarm is triggered as well as how long an individual record is preserved.

**Pre-alarm record time:** This sets the length of time showing events prior to a motion detection or sensor-triggered event that is included in the record.

**Post-alarm record:** Sets the length of time - from 10 to 60 seconds - that is added to the record after the event is finished.

**Expire time:** The time - up to 60 days - that an event is saved on the drive before it could be overwritten (See **Recycle Record** below).

PICTURE 4-17

You can set up all channels with same values by sellecting **All** and then configuring one channel.

### Stamp Tab

Select which cameras will display their ID and date stamp and where it'll appear on the screen.

Drag and drop the location of the camera name and date/time stamp to your desired location on the screen. This can be done individually or globally. A "Before" and "After" example is shown below.

PICTURE 4-18

PICTURE 4-19

### Recycle Record Tab

By selecting the box, you allow the DVR to record over old events when the hard drive is full. Otherwise, the DVR will stop recording when there is no more space available.

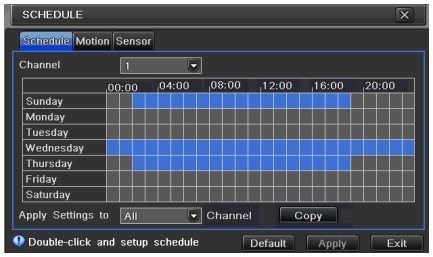
## 4.4 SCHEDULE CONFIGURATION

Configure your camera to record at specific times based on time of day, motion detection or other sensor input. There are three tabs; **Schedule**, **Motion** and **Sensor**

### Schedule Tab

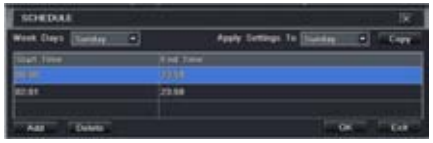
The schedule for automatic recording can be set either of two ways.

1. By highlighting individual hours for specific days by using the pencil tool in the upper right of the window. The adjacent eraser tool removes the highlighting in a block. Double click on either the pencil or eraser tool to turn them off. Settings can be copied and applied to any or all of the channels and to any other day.




PICTURE 4-20

2. Blocks of time to be recorded can also be set up by double clicking on a field adjacent to a day. Multiple schedules can be created and saved with start and stop times down to the minute. These can then be applied to multiple days and cameras.



PICTURE 4-21

Schedules made in one mode can be altered in the other mode.

### Motion Tab

Motion detected during the highlighted hours will cause the DVR to start recording. Setup is similar to that used in **Schedule** above. The default mode is for 24/7.

PICTURE 4-22

### Sensor Tab

This enables the DVR to record based on input from other sensors connected to the DVR. Like motion detection, it is default scheduled to be able to record at any time. It is also configured in the same manner as explained under **Schedule**.

PICTURE 4-23



## 4.5 ALARM CONFIGURATION

Alarm configuration allows the DVR to begin recording based on input from other remote sensors such as infrared motion detectors or contact alarms which are connected to it.

There are five submenus; **Sensor**, **Motion**, **Video Loss**, **Other**, and **Alarm Out**.

### SENSOR

In this window you can setup optional external sensors to cause the DVR to begin recording. There are three tabs in this window: **Basic**, **Alarm Handling** and **Schedule**.

### Basic Tab

This allows you to enable the input from attached sensors. You can also identify the sensors by name for ease in determining location.

Set the alarm type according to whether the alarm is NO (Normally Open) or NC (Normally Closed). See your alarm's manual for details.

Alarms can be individually configured or globally set using the **All** button.

PICTURE 4-24

### Alarm Handling Tab

Configure how you want the DVR to handle the input from an activated alarm. Each sensor input can be set to launch individual sequences of action or they may be globally set through the **All** button to have the same results.

PICTURE 4-25

**Hold Time:** determines the time allowed between consecutive alarm events. If the alarm is triggered again within this time, it will be treated as a single event and the DVR will continue recording before stopping – unless, of course, a subsequent alarm is activated within the hold time.

**Trigger:** This is what the DVR will do once activated by an alarm. Selecting **Setting** will open a new window with three tabs; **Alarm**, **To Record**, **To PTZ**

**Alarm** allows you to set whether a buzzer will sound, which camera (if any) will display in full screen mode, whether an e-mail will be sent and whether a signal will be sent via the ALARM OUT port.

PICTURE 4-26

**To Record** allows you to determine which cameras will begin recording. Cameras can be set to record individually, in blocks, or all cameras can be activated.

**To PTZ** activates preset, cruise or track functions on selected Pan-Tilt-Zoom cameras. Depending on your model of PTZ camera, one of up to 128 pre-set actions can be engaged. Check your camera's manual for details.

### Schedule Tab

Set by default to always on, the schedule can be altered in the same manner as that used in **Schedule** in **SECTION 4.4**.

PICTURE 4-27

## MOTION

### Motion Tab

As with the **Alarm** function above, it incorporates hold time and can trigger procedures.

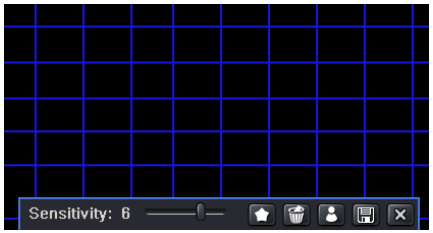
Select which cameras you wish to start recording on motion detection. Set the holding time which determines the length of time the cameras continue recording after motion stops.

Under the **Trigger** setting, you can indicate which other cameras begin recording when motion is detected. For example, if you want cameras 2 and 3 to start recording when channel 1 detects motion, you would check select those channels.

PICTURE 4-28

In addition, the user can set the sensitivity of certain areas within the field of view by selecting the **Area** setting for the respective camera.

Specific areas can be made sensitive by applying a blue grid to the desired section of the screen. The blue grid can be applied to the entire screen – signifying that the entire field of view is sensitive - by clicking on the **star button**. The **trash can** button will remove the grid completely. Click and drag with the mouse on the screen to draw or erase the grid in select areas.

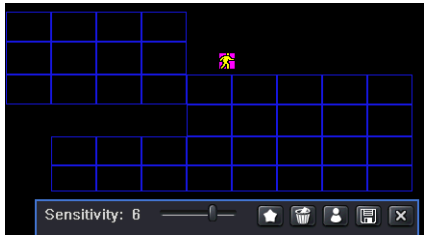



PICTURE 4-29

As sensitivity is influenced by color and light level, you can adjust its values according to your specific conditions. The default value is "4." A setting of "8" is most sensitive while a setting of "1" is minimally sensitive.



Click on the icon showing a silhouette of a person and an illustration of a walking figure will appear on the screen. Test your settings by dragging the figure across the blue grid to see if the sensitivity value and motion area are suitable to current conditions. If they are, click the **o** icon to save before exiting using the **X** button.




PICTURE 4-30

Right-clicking in the screen will show or hide the menu at the bottom of the screen.

### Schedule Tab

This is also set to be on all the time by default and it can be adjusted in the same manner as the **Schedule** configuration in **SECTION 4.4.**

PICTURE 4-31

## VIDEO LOSS

In the event that signal is lost by one camera, others can be activated to record while additional devices can also be triggered.

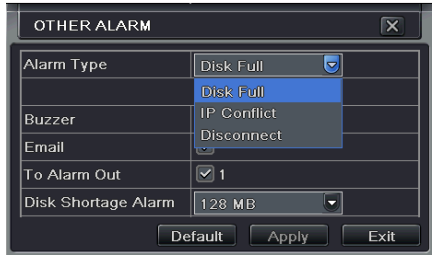
Like the **Trigger** tab in the **Alarm Handling** section of the **Sensor** menu, you can select the events that you wish to occur in the event that a video input is lost. Both Alarms and PTZ events can be scheduled as in the **Sensor** menu above.

PICTURE 4-32

## OTHER ALARM

In this menu you can set the DVR to alert you to a full Hard Drive, IP Conflict on the network or a Disconnection.

You can set the response as well as at what threshold of remaining disk space you wish to be alerted.



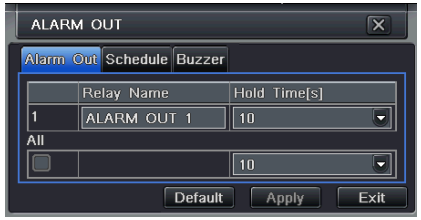

PICTURE 4-33

## ALARM OUT

Set how the alarms are handled and transmitted in this window. This controls any device attached to the ALARM OUT port on the back of the DVR. There are three tabs; **Alarm Out**, **Schedule** and **Buzzer**.

### Alarm Out Tab

You can set the relay alarm out name as well as the hold time. Hold time is the interval between consecutive alarm activations so multiple events within the interval will not cause the alarm to sound again.




PICTURE 4-34

### Schedule Tab

The default setting is for the ALARM OUT to be active all the time, but this can be changed to meet your particular requirements in a similar manner to **Schedule** in **SECTION 4.4**.

### Buzzer Tab

As with the **Alarm Out** hold time, the internal buzzer can be enabled and given a hold time.



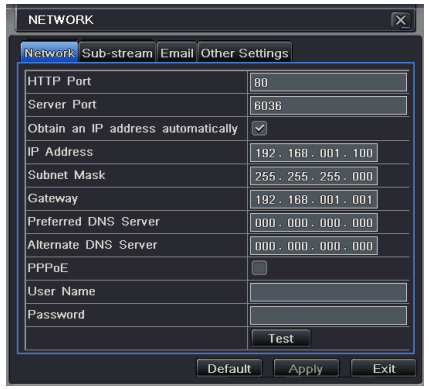
## 4.6 NETWORK CONFIGURATION

This section covers setting up your DVR so that it can be remotely monitored from another computer on your network, over the Internet or from mobile wireless devices. E-mail alerts are also configured here and you can set up a DDNS service for a more reliable connection to your remote devices. The four tabs in this window are **Network**, **Sub-Stream**, **Email** and **Other Settings**. If you will only be monitoring the DVR from another computer on your network, you will only need to use the first three tabs.

It is important that your DVR is connected to your network router and that the router is powered on before proceeding.

### Network Tab

**HTTP Port** – This is the port the DVR will occupy on your computer network. When accessing the DVR remotely from the Internet, you will need to enter your network's IP address (obtained in the next step) in the address bar of an Internet Explorer window. For example: http://192.168.0.25




PICTURE 4-35

**NOTE!** The default value is 80. If port 80 is already occupied by another device on the network, then another port will need to be selected. Choose another number in the same range; 81-89. In this case, you will have to add the port to the IP address when entering it into the Internet Explorer window. For example, if the port is now 82, then you will need to enter http://192.168.0.25:82

**Optain IP Address Automatically** – Clicking this box will obtain the IP address, subnet mask, and gateway IP from the router.

**PPPOE** – Selecting this enables Point-to-Point Protocol over Ethernet (PPPoE) which allows you to directly connect your DVR to the Internet through your modem. Do not use this unless required by your Internet Service Provider (ISP) or if you are already connected to a router. Contact your ISP for your account information including user name and password. The **TEST** button will verify that your information is correct.

**Definitions and descriptions of network configuration:**

| Parameter | Definition |
|---|---|
| HTTP Port | The network port number for accessing the DVR via Internet Explorer. The default port is 80 |
| Server Port | The port number for data. The default port is 6036 |
| **Static IP** | |
| IP Address | The IP address of the DVR on your network |
| Subnet Mask | The server's subnet mask |
| Gateway | The gateway of the router |
| DNS Server | The address of the Domain Name System (DNS) server |
| **PPPoE** | |
| User Name | User name of the broadband account |
| Password | Password for broadband account |

### Substream Tab

The substream is the data that is sent to remote monitoring devices. Due to bandwidth concerns, these data streams are generally smaller than those sent directly to the DVR itself. These streams run in parallel with the main stream sent to the hard drive and they do not affect each other.

Substream settings are configured in the same manner as that used for the primary stream settings in the **Record Bitrate** tab in **Section 4.3** Certain settings will be grayed out and cannot be changed due to throughput concerns. The definitions are repeated for your convenience:

PICTURE 4-36

| Parameter | Options | What it Means |
|---|---|---|
| Resolution | D1, CIF | D1 = Full TV resolution, CIF = 1/2 D1. D1 takes more room on the hard drive than CIF |
| FPS | 1-30 | Frames per second. More frames makes for smoother video but takes up more room on the hard drive. |
| Encode | VBR, CBR | Variable Bit Rate versus Constant Bit Rate. VBR provides better compression, but issues may arise when streaming for remote viewing. |
| Quality | Lowest – Highest | Only available when VBR is selected. The higher the quality, the more drive space required. |
| Max Bitrate | 256-2084kbps | Your network may not have enough bandwidth to handle maximum rates from all of your cameras. Adjusting these settings to suit your network will improve performance and on-screen image quality. |



### Email Tab

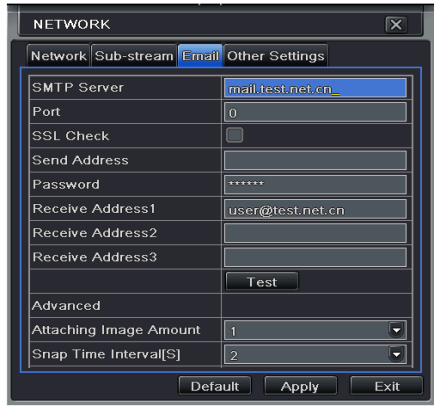
This tab allows you to set how your DVR will send out e-mail alerts. You will be able to send e-mail alerts to three addresses.

**NOTE!** Depending upon your settings, the system can generate a lot of e-mail alerts. For that reason, we recommend setting up a dedicated e-mail address specifically for the system to send alert notices. If you do not have your own e-mail system (such as a corporate mail server) you should consider using a free e-mail provider. However, because many free e-mail services allow only a limited amount of e-mail traffic we specifically recommend using Google's Gmail service with its higher limit. Similarly, you will want the alert e-mails to go to a different account than the one sending them. This will ease your management of these alerts.

If you do not have your own e-mail system, please set up a free account which the DVR can use to send out alerts before proceeding.

For the example below, we will use Gmail. The settings can be found under **Options** when logged into your Gmail account.

Clicking on any of the fields will bring up the virtual keyboard allowing you to enter the data. The virtual keyboard is capable of handling upper and lower case letters as well as numbers and symbols. Click the **ENTER** button to enter your input or **ESC** to exit the field without applying any changes.




PICTURE 4-37

**SMTP Server:** smtp.gmail.com

**Port:** 465 (standard port for Gmail - others may vary)

**SSL Check:** You will need to select this for Gmail. Other ISPs may vary.

**Send Address:** Enter your new address. This will appear on alert e-mails sent from the DVR

**Password:** Enter the password you created for this account. Remember, it will be case-sensitive.

**Receive Addresses:** You may set up to three e-mail addresses to receive alerts. It is strongly advised that you do not use the same address that the DVR is using to send alerts.

**Advanced**

**Attaching Image Amount:** The alert e-mails can include up to three images

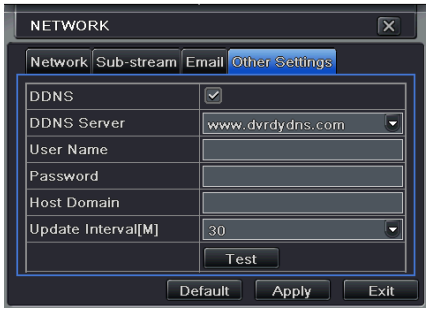
**Snap Time Interval:** The interval of the images can range from every second to every five seconds.

### Other Settings

Commercial ISPs provide their customers with dynamic addresses (IP numbers). These numbers can change from time to time depending upon your service provider. Doing so can cause you to lose the ability to remotely access your DVR from your mobile phone or other out-of-network device. To prevent this from happening, we recommend using a Dynamic Domain Name Service (DDNS). This will give you a domain name that can be linked to your IP address and will automatically – and invisibly – forward remote connections to your network when the IP address changes.

Q-See offers DDNS for free at ***MyQ-See.com***. Create a domain name, user name and password before proceeding. ***DynDNS.com*** also offers a similar free service. This is covered in-depth in **SECTION 7.4**.

Select the box in the DDNS field to enable DDNS. You will then enter the user name, domain name and password you created into the appropriate fields. You can also select the interval in days at which the DDNS checks to see whether your IP address has changed. Intervals range from every 30 minutes to 24 times in 60 days.

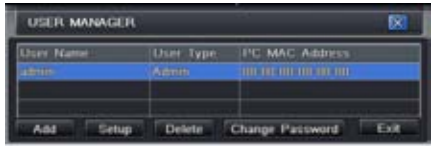



PICTURE 4-38

You can now access the DVR remotely by inputting that domain name into the web browser.

## 4.7 USER MANAGEMENT

You can set up accounts for each individual user and grant them control of select parts of the surveillance system. An administrator account is already created on the DVR. Additional accounts can be created for users but only one administrator account is allowed.




PICTURE 4-39

To add a user select the **Add** button and the **ADD USER** window will open. It will have two tabs; **General** and **Authority**

### General Tab

Input the name, password and select the type of user – normal or advance.

If you only want this user to be able to access the DVR from a specific computer on the network then select the **Binding PC MAC Address** option and then enter the MAC address of that computer.

PICTURE 4-40

### Authority Tab

In this tab you can give this user access to all or part of the system and its functions.

PICTURE 4-41

**Setup** button – Modify user's name, type, binding PC Mac address and etc. The Admin account may not be modified.

**Delete** button –Remove a user from the system

**Change Password** button – Modify a user's password. The admin password may be changed. The default is ***123456***.

## 4.8 PAN-TILT-ZOOM (PTZ) CONFIGURATION

If you are connecting optional Pan-Tilt-Zoom cameras, the controls are set from this window in the **Serial Port** and **Advanced** tabs.

### Serial Port Tab

You will need to consult your PTZ camera's manual for details regarding protocol and baud rate. Please note that the DVR may support more features than your camera offers including protocol and number of preset programs.

Cameras can be individually configured or a global set-up can be implemented through the **All** button.

PICTURE 4-42

### PTZ Definitions and Descriptions:

| Parameter | Settings | What it Means |
|---|---|---|
| Address | 1-255 | The address of the PTZ camera |
| Baud Rate | 110-21600 | The speed that data is transmitted |
| Protocol | | The communication protocol used by the camera. Supported protocols are; NULL, PELCOP, PELCOD, LILIN, MINKING, NEON, STAR, VIDO, DSCP, VISCA, SAMSUNG, RM110, HY |

### Advanced Tab

You can set your camera to follow a preset program or set cruising or tracking behaviors by selecting the **Setting** button in the **Preset**, **Cruise** or **Track** columns respectively.

PICTURE 4-43

### Preset

Clicking a **Setting** button in the **Preset** column will bring up another window

PICTURE 4-44



And, selecting **Setting** will bring up the camera view along with a control panel to program the camera's motion.

PICTURE 4-45

The dome's rotation can be controlled vertically, horizontally and diagonally along with its speed. The lens zoom, focus and iris (light level) can be set as well. Select the number for this program and click the **Save** button to save the settings. You can hide the control panel by clicking on the "**-**" button or right-clicking on the screen. The control panel can be unhidden by right-clicking on the screen again. The **X** button will exit the control interface.

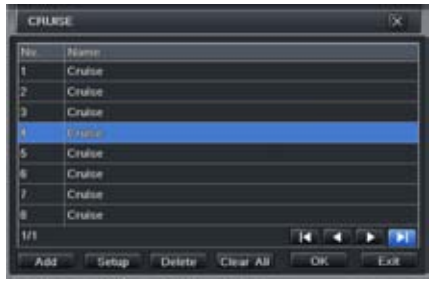
### Cruise

Selecting a **Setting** button from the **Cruise** column will open the **Cruise** window.

Select **Add** or double-click on an existing line to modify and the **CRUISE PRESET** window will open.

**Delete** will remove a selected cruise line

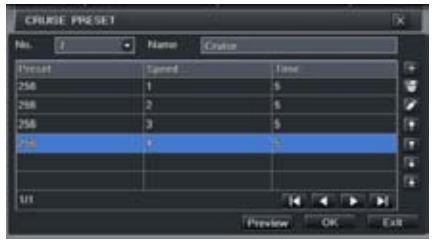
**Clear All** will remove all of the cruise lines.




PICTURE 4-46

The set of icons to the right of the screen are used to configure each cruise setting.

**Preview** – Preview the cruise to ensure that you have the desired results.




PICTURE 4-47

| Name | Symbol | What it Does |
|---|---|---|
| Add | + | Opens a window to allow the user to set the speed and time of a new preset point |
| Delete | | Deletes a preset point |
| Modify | | opens the settings window for the selected preset point allowing you to change the settings |
| Arrows | | Enables the user to alter the position of a setting in the cruise order. |
| | | Move a preset point all the way to the top of the order |
| | | Move a preset point up one position in the list |
| | | Move a preset point down one position in the list |
| | | Move a preset point to the bottom of the order |

**Track**

This interface is used to program the tracking routine for the camera. Clicking on the **Track** button will bring up the live view for that camera plus a control panel:

PICTURE 4-48

The user can control the dome's rotation direction, plus speed as well as the zoom, focus and iris.

**Start Record** – The system will begin recording the sequence of movements you perform on the PTZ control panel. Clicking this again will stop the recording.

**Start Track** – This will play back the tracking sequence you just recorded. Clicking on this button again will stop the playback.

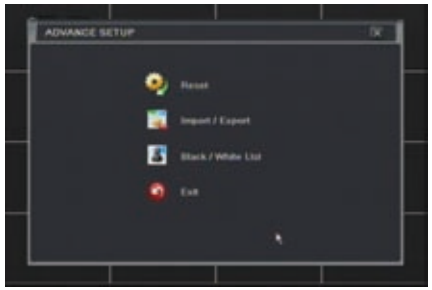


## 4.9 ADVANCED

In this set of commands, the user can erase all the settings, import or export data files to and from the DVR and control who can remotely access the DVR through three submenus: **Reset**, **Import/Export** and **Black/White List.**

### RESET

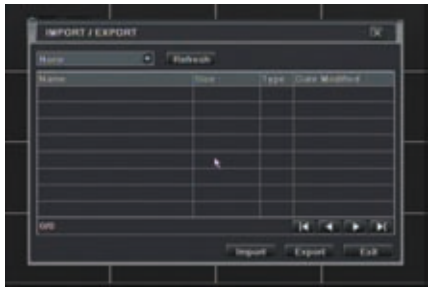
Clicking on this option will open a warning dialogue asking you to confirm that you wish to remove all settings and reboot the system. You must select **OK** to continue with the reset or hit **CANCEL** to exit without changes.




PICTURE 4-49

### IMPORT/EXPORT

Use this interface to export select data files to mobile Flash drives or an external USB drive through the backup function. Specific data files can also be retrieved from mobile or external storage devices and recorded onto the DVR.




PICTURE 4-50

### BLACK/WHITE LIST

From here, an authorized user can control which computer users are allowed to access the DVR.

PICTURE 4-51

The **Blacklist** is used to deny access to remote computers within a certain IP address segment.

The **Whitelist** is used to permit access by users from select IP address segments.

**EXAMPLE:** You wish to block access to the DVR from computer users within the IP address segment ranging from 196.168.000.002 to 196.168.000.004. Select the **Blacklist** button and then enter the first segment in the **IP From** field and the last address within the segment in the **To** field. You may add additional segments before hitting **Apply** to save your settings and then exiting this window.

## 4.10 BACKUP

Access the recordings on the DVR, play them back and backup the recordings to an external storage device.

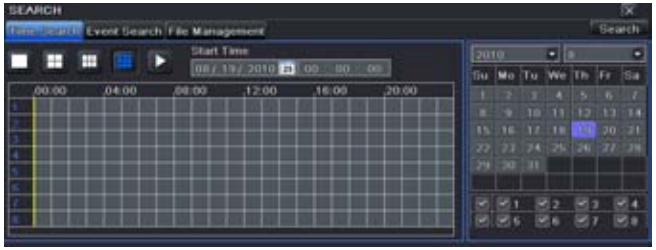
PICTURE 4-52

Three submenus appear in this section: **Time Search**, **Event Search** and **File Management**.

**NOTE!** Throughout this window, if the screen resolution is VGA 800*600, the time search interface will show a hide button. Clicking on this button will expand or minimize the entire interface as needed.

### TIME SEARCH

Search for an event within a range of dates and times.



PICTURE 4-53

Select which channel you wish to search and the screen display mode. The **Calendar** icon in the **Start Time** window allows you to select a start date. Highlighted dates indicate that there is recorded data for those days.

The vertical column of numbers to the left of the grid are the available channels. The horizontal headings are blocks of time within the day.

You can select which time to begin the review by entering it in the start time window or clicking on the time grid and moving the yellow line to the approximate start time.

Clicking on the **PLAY** button will begin the playback from the time selected. It will also bring up a playback toolbar allowing finer control of the playback process.

PICTURE 4-54



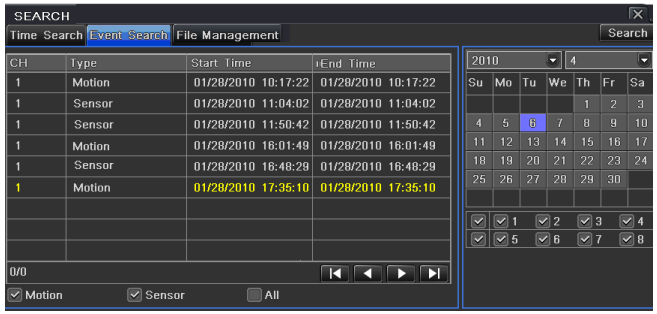
### EVENT SEARCH

Selecting this tab will bring up a list of recorded events. You can choose whether to display events triggered by Motion, Sensor or both.

Double-click the event file you wish to play back.

### FILE MANAGEMENT

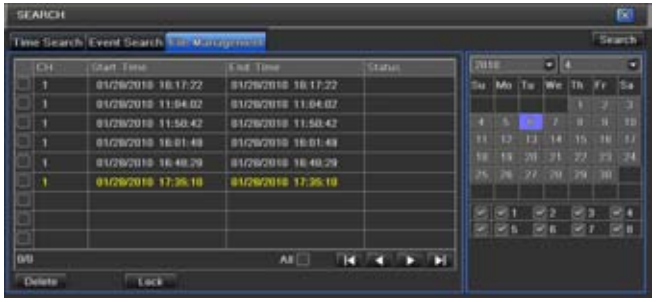
From within this tab you can lock, unlock or delete recorded events from the drive.




PICTURE 4-55

Clicking the **Search** button in the upper right of the window will bring up a list of events to be displayed. Results can be filtered by selecting date and channels if desired.

**LOCK** – Selecting a file and then clicking the Lock button will protect the event from being overwritten or deleted unless the entire drive is reformatted



PICTURE 4-56

**UNLOCK** – This will remove the file protection and the event recording can be deleted or overwritten normally

**DELETE** – If the event is not Locked, this will remove the selected event from the DVR.

Utilizing the remaining icons in the **MAIN MENU**; **Information**, **Manual Alarm**, **Disk Manage**, **Upgrade**, **Logoff** and **Shut Down**, the user can track events, system status, connected alarm(s), upgrade the firmware, logoff and shut down the system.

# BACKUP CHAPTER 5

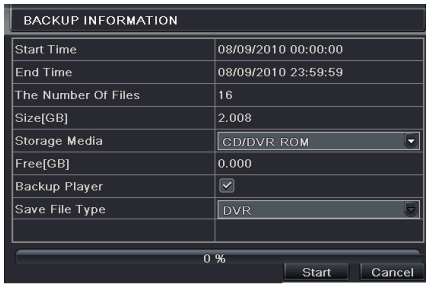
This DVR supports backing up files to USB flash drives, USB hard drives and USB DVD burners through the USB port on the front panel. Remote backups can be performed over the Internet. Refer to Section **7.6 Remote Backup**.

Selecting **BACKUP** in the **Main Menu** will open the **Backup** configuration window.

PICTURE 5-1

Set the start and end times as well as channel(s) you wish to back up. Clicking the **Search** button will bring up the search results in the **Data Backup** list box.

Select specific events or select the **All** button. Clicking the **Backup** button will bring up the **Backup Information** window:




PICTURE 5-2

This window will present a summary of the number of files, starting and ending times, total size of the files and whether you have space available on the receiving storage media. You can select which type of device you are recording to as well as what type of file you will be creating.

Clicking on the **Start** button will begin the backup and the progress bar will display the progress.

**NOTE!** Two folders are created when backing up the events to a USB storage device. One will contain the video files while the other, labeled **Video Play** contains the software needed to playback the videos on a PC. To view the video files, open the **Video Play** folder, and run Videoplay.exe. Click on **Open Path** and navigate to the folder containing the video files to begin playback.



# DVR MANAGEMENT CHAPTER 6

## 6.1 INFORMATION

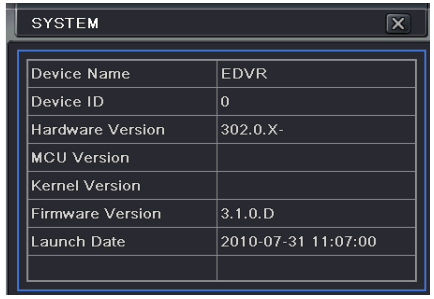
PICTURE 6-1

This window enables the user to monitor the status of the system, its network connection, online users, history and events through five submenus: **System**, **Event**, **Log**, **Network** and **Online Users**.

PICTURE 6-2

### SYSTEM INFORMATION

Data on the system's hardware, MCU (MicroController Unit), kernel and firmware versions can be found here along with the device's name and ID.




PICTURE 6-3

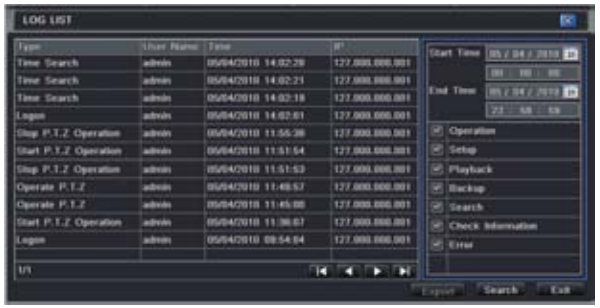
## EVENT INFORMATION

This window lists recorded events. This list can be searched by date, time, type of event and channel.

PICTURE 6-4

## LOG INFORMATION

This window lists user activity within the system.

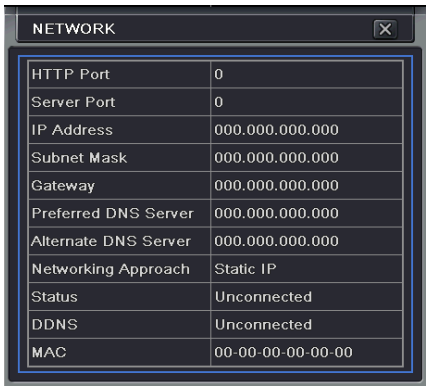



PICTURE 6-5

This record can be searched by type of operation, date and time, and etcetera. It can also be exported to external USB storage devices using the backup function.

## NETWORK INFORMATION

This window shows the status of the DVR on the network including its assigned port, and other networking configurations.




| | |
|---|---|
| HTTP Port | 0 |
| Server Port | 0 |
| IP Address | 000.000.000.000 |
| Subnet Mask | 000.000.000.000 |
| Gateway | 000.000.000.000 |
| Preferred DNS Server | 000.000.000.000 |
| Alternate DNS Server | 000.000.000.000 |
| Networking Approach | Static IP |
| Status | Unconnected |
| DDNS | Unconnected |
| MAC | 00-00-00-00-00-00 |

PICTURE 6-6



## ONLINE USER INFORMATION

Information on remote users currently connected is displayed in this window.

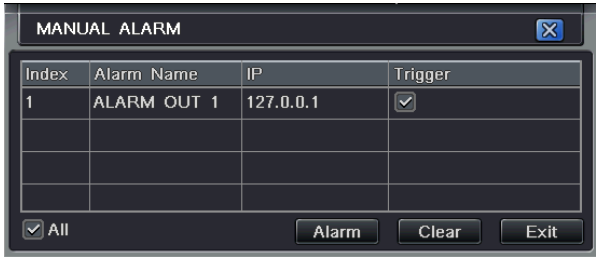
PICTURE 6-7

**Refresh** – Updates the list of online users

**Disconnect** – The Administrator can disconnect a selected user from the DVR. That PC will not be able to access the device for five minutes thereafter.

## 6.2 MANUAL ALARM

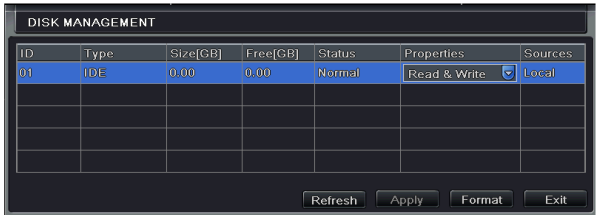
This displays the configuration of the manual alarm.




PICTURE 6-8

## 6.3 DISK MANAGEMENT

This window displays information on the drive mounted within the DVR including size, available space and status.




PICTURE 6-9

The drive can be set to read only, which will disable recording, but will preserve the data currently stored within it.

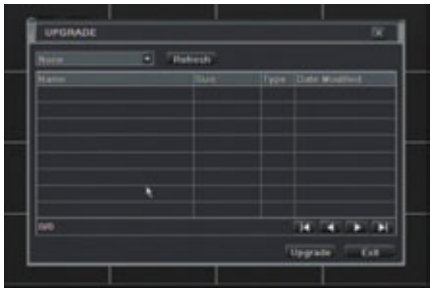
If you have upgraded your system by installing a new drive (**See Chapter 9**) you will need to first format the new hard disk before recording. You can reformat the current drive if desired.

**WARNING!** Reformatting the drive will delete all recorded files stored on the hard disk regardless of whether they are Locked!

**Refresh** will update the information about the drive.

## 6.4 UPGRADE

This window will display firmware updates that are loaded on a USB flash drive in the front USB port.



PICTURE 6-10

Firmware upgrades are available from Q-See at ***www.Q-See.com*** and may be found by looking up your specific model. Firmware should only be upgraded to fix a specific problem or add features as ongoing development may result in features being removed.

The firmware download should be loaded onto an empty USB flash drive from the downloading computer and then transferred to the DVR using the front USB port.

**WARNING!** Updating the firmware incorrectly or using the wrong update can permanently damage the chipset on the DVR and render it unusable. Updates are written to either resolve issues or add features to the DVR. If you are not experiencing performance issues or do not need a feature added by the update, we recommend not running the update.

## 6.5 LOGOFF

Logging out of the DVR is recommended when there are multiple users or when physical access to the DVR is not restricted. Clicking on the **Logoff** icon will bring up a window asking for confirmation.

After logging off, a user can log back in by clicking on the **Menu** icon and entering their user name and password.

## 6.6 SHUT DOWN

This is a "soft power down" of the DVR.

**WARNING!** It is vital that the DVR be instructed to shut down using the **Shut Down** menu option prior to unplugging the device in order to avoid damaging the firmware or hard drive itself.



# REMOTE SURVEILLANCE



This DVR can be accessed remotely via a connected network and over the Internet.

## 7.1 NETWORK ACCESS

Accessing the DVR from a computer or computers attached to the same router as the DVR requires setting up either DHCP or Static IP only. This is configured in the **NETWORK** setting. You will be accessing the DVR by entering the IP address obtained during this setup into an Internet Explorer browser window just as if you were opening a web page.

Once you have configured your **NETWORK** settings using DHCP or Static IP following the instructions below, you may skip to **Section 7.5 "Setting up Internet Explorer."**

## 7.2 REMOTE (INTERNET) ACCESS

There are three methods you can use to set up the DVR to be accessed remotely over the internet for viewing on mobile devices and computers not on your network; DHCP, Static IP, and PPPoE. You will also need to set up Port Forwarding (**See Section 7.3**).

### DHCP

Most routers are factory configured to use DHCP.

DHCP involves having your router assign an IP address to the DVR on the network.

**STEP 1.** Select the **Setup** icon in the **Main Menu** (**Red Box in Picture 7-1**)

PICTURE 7-1

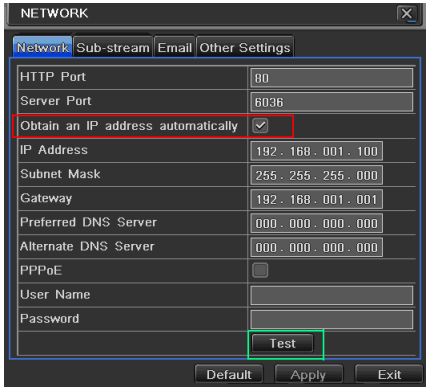
**STEP 2.** Select the **Network** icon (**Red box in Picture 7-2**)

PICTURE 7-2

**STEP 3.** Check the box after **Obtain an IP address automatically** (**Red Box in Picture 7-3**)

**STEP 4.** Click the **Test** button (**Green Box in Picture 7-3**)

**STEP 5.** After receiving the **OK** message in the lower left-hand corner of the screen, click the **Apply** button to save the IP address and then exit the window.




PICTURE 7-3

You have now completed DHCP setup for network access, but we suggest taking the following, additional, steps in order ensure a stable connection by preventing the router from assigning a new address to the DVR at a later date.

**STEP 6.** Upon return to the **Main Menu**, click on the Information icon (**Green box in Picture 7-1**) and write down the IP address.

**STEP 7.** Return to the **Network** window (**See steps 1 and 2**) and write your new IP address in the **IP Address** field.

**STEP 8.** Deselect the "**Obtain an IP address automatically**" checkbox, select **Apply** before exiting the window.

The IP address will be used to forward ports 80 and 6036 on the router when setting up access to the DVR from remote computers.

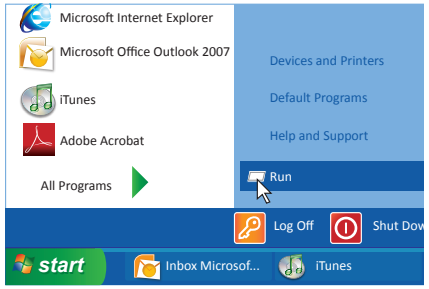


## STATIC IP

This process requires that you set up the network settings on the DVR to match those of the attached router. ***Owners of 2Wire Brand routers should use DHCP.***

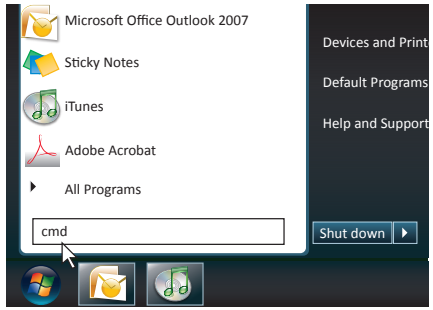
**STEP 1.** To access the router's settings you will need to enter the **Command** (CMD) panel on a computer also connected to the same router.

**A. WINDOWS XP** – Select **Run** from your Windows **START** menu (lower left of screen) and type "**cmd**" after the prompt.




PICTURE 7-4

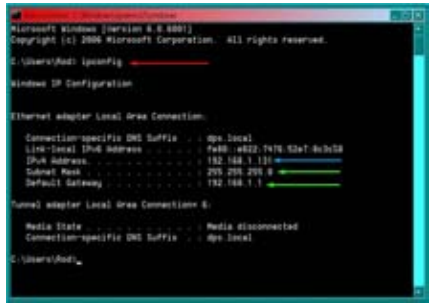
**B. WINDOWS VISTA** and **WINDOWS 7** – Click on the **START** menu (Windows icon) in the lower left of your screen. Type "**cmd**" into the field that says, "**Search programs and files**" and hit **ENTER** or click on the magnifying glass icon.




PICTURE 7-5

**STEP 2.** Type "**ipconfig**" at the prompt (**Red arrow in Picture 7-6**) to access router settings.

**STEP 3.** Write down the IP4v address (**Blue arrow**) as well as the gateway and subnet mask numbers (**Green arrows**).

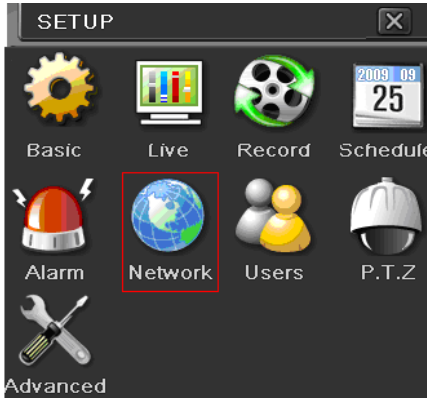


PICTURE 7-6

**STEP 4.** Select the **Setup** icon in the **Main Menu** (**Red Box in Picture 7-7**)

PICTURE 7-7

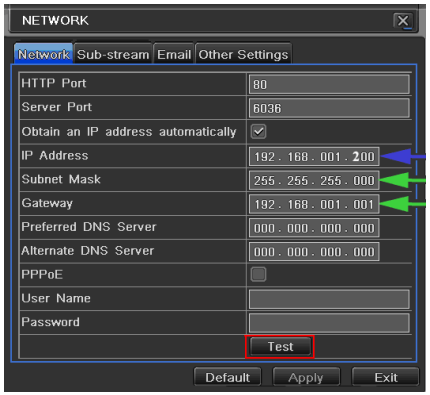
**STEP 5.** Select the **Network** icon (**Red box in Picture 7-8**)




PICTURE 7-8

**STEP 6.** Enter the gateway and subnet mask numbers into the appropriate fields (**Green arrows in Picture 7-9**)

**STEP 7.** For the DVR's IP address, you will need to enter the first three sets of numbers from the IP4v address into the IP Address field (**Blue arrow in Picture 7-9**).




PICTURE 7-9

**STEP 8.** To finish the IP address, you will need to enter a fourth set of numbers that is different than any other device attached to the same router. If the fourth set of numbers in your IP4v address is a single or double-digit number, then you can enter any three-digit number up to 254. If, on the other hand, the IP4v address ended with a number in the 100s, then enter a number between 200 and 254.

**STEP 9.** Click the Test button (**Red box in Picture 7-9**) to verify that your settings avoid conflict.

**A.** If you get the OK message in the lower left corner of your screen, you may click on the Apply button before closing the window.

**B.** If you get a failure message then try a different three-digit number for the IP address.

**IMPORTANT!** Do not use 255 or higher to complete your IP address as these addresses are reserved for other devices and components.

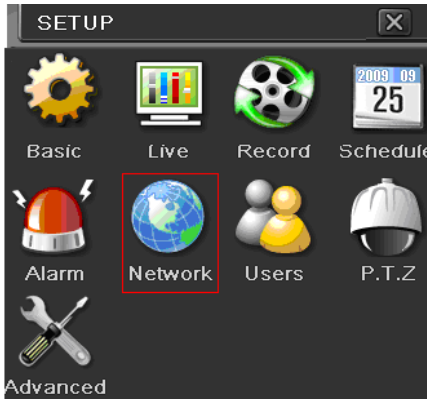
## PPOE

If you are going to attach the DVR directly to a DSL or cable modem instead of to a router then select the PPPOE option in the Network options. Before you proceed, you will need to contact your ISP to obtain your User Name and Password.

**STEP 1.** Select the **Setup** icon in the **Main Menu** (**Red Box in Picture 7-10**)

PICTURE 7-10

**STEP 2.** Select the **Network** icon (**Red box in Picture 7-11**)



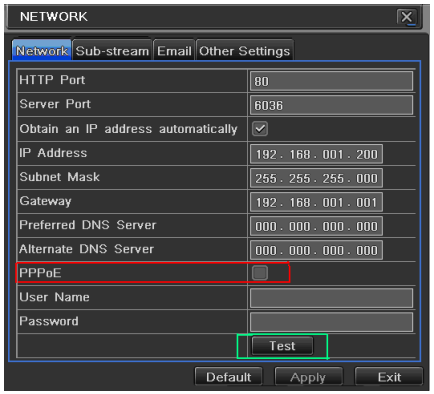

PICTURE 7-11

**STEP 3.** Check the box next to **PPPoE Red Box in Picture 7-12**)

**STEP 4.** Enter the User Name and Password obtained from your ISP in the fields below **PPPoE**

**STEP 5.** Click the **Test** button to verify your settings.

**STEP 6.** After receiving the **OK** message in the lower left of your screen, click on the **Apply** button to save your settings before exiting.




PICTURE 7-12

## 7.3 PORT FORWARDING

Port Forwarding allows computers and devices outside of your network to communicate with the DVR. You will need to forward ports 80 and 6036 from the attached router to the IP address of the DVR. Your router must be powered up and attached to the DVR before proceeding.

**STEP 1.** Go to ***www.portforward.com/qsee***

**STEP 2.** Choose your DVR or Series (QT4)

PICTURE 7-13

**STEP 3.** Select the make and model of your router

PICTURE 7-14

**STEP 4.** To get the **FREE** instructions, click the "**Click here to skip this advertisement**" link in the upper right hand corner of the page. You ***DO NOT*** need to purchase the software advertised on this page to set up port forwarding.

PICTURE 7-15

**STEP 5.** After clicking on the link, follow the instructions given on the site.

**STEP 6.** To confirm that your port(s) have been forwarded correctly, go to ***www.canyouseeme.org***

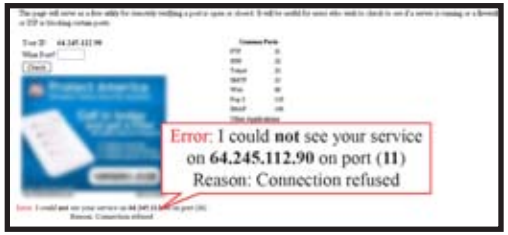
**A.** Enter the port number for your DVR and click "**Check**" by default these DVRs use ports 80 and 6036

**B.** If the port is open, you will see the following message, "Success: I can see your service…"

PICTURE 7-16

***You may now move on to the next section.***

**C.** If the port is not open, you will see the following message, "Error: I could not see your service…"

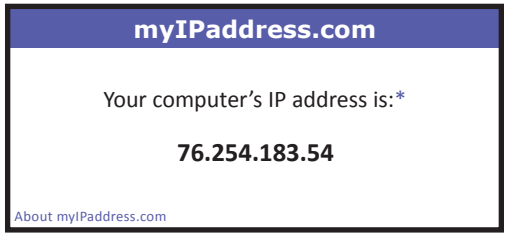



PICTURE 7-17

To resolve this issue, please go back to your DVR and change your port number to 82, 85 or 89. If, after trying all three ports and an error still occurs, contact Q-See Technical Support at 877-998-3440 Ext. 540.

**NOTE!** If you are successful after changing the port number, you will need to add that to the IP address when accessing the DVR via the Internet. If, for example, you changed to port 82, the address would now read 64.245.112.90**:82**

When you access the DVR from a remote computer you will need to use a different address in the Internet Explorer browser window. Instead of entering the IP address of the DVR, you need to enter the public IP address of the router to which the DVR is attached. You can obtain this address by going to ***www.MyIPAaddress.com*** from a computer that is attached to the same router as the DVR. This website will display a box with the IP address you need. It will be the bold number where the example shows 76.254.183.54




PICTURE 7-18



## 7.4 DDNS (DYNAMIC DOMAIN NAME SERVICE)

You can access the DVR over the Internet using a static or dynamic IP address. However, your service provider can change this dynamic address from time to time. When it changes, you will have to return to ***www.MyIPAaddress.com***, again from a computer attached to the same router as the DVR to get the new public IP address.

There are two solutions to this problem. The first would be to obtain a static IP address from your ISP – which can be expensive. A second – *and free* – option is to use a dynamic domain name service (DDNS) to get a domain name that can be linked to your dynamic IP address. In addition to automatically keeping up with the changes in the address, you will now be able to enter a domain name rather than a string of digits when accessing the DVR in Internet Explorer.

While there are multiple free DDNS services available, we recommend using ***www.MyQ-See.com*** or ***www.DynDNS.com*** as the DVR has been already configured to accept account information from these two services.

**NOTE!** Before setting up DDNS, you must have previously set up Port Forwarding as described in the previous section.

### Setting up DDNS

The following instructions are for setting up DDNS with MyQ-See, instructions for DynDNS are available on their website.

**STEP 1.** Using a computer that is connected to the same router as the DVR, use Internet Explorer to go to ***www.MyQ-See.com***

**STEP 2.** Click on the "**New User?**" link at the bottom of the page (***http://MyQ-See.com/reg.asp***)

**STEP 3.** Complete the registration process by following the on-screen directions and click the **Submit** button at the bottom of the screen.

PICTURE 7-19

**STEP 4.** You will now be asked to create a domain name. Domain names must begin with a letter (a-z) or a number (0-9) and cannot contain a hyphen. Once you've decided upon a name, click on the "**Request Domain**" button. If it is available you will see a confirmation screen along with the IP address associated with it. Confirm that this matches the number shown at ***www.MyIPAaddress.com*** Your domain name will look like this: ***http://example.myq-see.com***

PICTURE 7-20

**STEP 5.** Once you have obtained your domain name, you will need to configure the DVR for access using it.

To set up the DVR for access through a dynamic domain name:

**STEP 1.** Go to the **Main Menu** and select the **Setup** icon (**Red box in Figure 7.21**)

PICTURE 7-21

**STEP 2.** Select the **Network** icon (**Red box in Picture 7.22**)

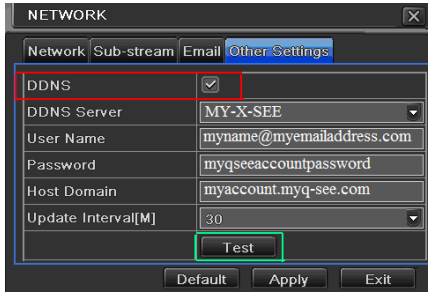
PICTURE 7-22

**STEP 3.** Select DDNS (**Red box in Picture 7.23**)

**STEP 4.** Select the service – MyQ-See or DynDNS you are using and enter the account information you registered with the domain name service.

**STEP 5.** Click the **Test** button

6. After receiving the **OK** message in the lower left corner of the screen, click on the **Apply** button to save your settings.




PICTURE 7-23

You are now able to access the DVR remotely over the Internet by entering the domain name into a browser window.



## 7.5 ACCESSING THE DVR THROUGH INTERNET EXPLORER

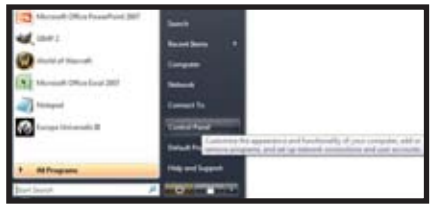
Once you have configured the network settings on the DVR to match those on your router and forwarded the ports needed by the DVR to enable remote access over the Internet, you will be ready to remotely view your cameras using a webcam program based on an ActiveX control. For this to work, you will have to enable the ActiveX control options that are built into Internet Explorer. It is strongly suggested that you be running the latest version of Internet Explorer (currently IE8). The instructions below will describe the process using that version of the browser. Instructions for users with IE6 or 7 are available in the Resources library of our Technical Support page.

### USER ACCOUNT CONTROL FOR WINDOWS VISTA AND WINDOWS 7

Some users of computers using Windows Vista or Windows 7 operating systems may receive an error message informing of a codec that is missing or not installed. This conflict can be resolved by turning off User Account Control (UAC).

**Windows Vista**

1. Open the Control Panel (accessible by clicking on the Windows icon in the lower left of your screen.



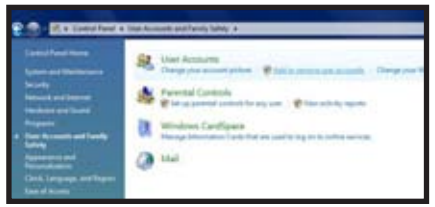
PICTURE 7-24

2. Select User **Accounts and Family Safety**.

User Accounts and Family Safety
Set up parental controls for any user
Add or remove user accounts
Change user account settings and passwords, and set up parental controls.
Customize colors
Adjust screen resolution

PICTURE 7-25

3. Select "**Add or Remove User Account**."

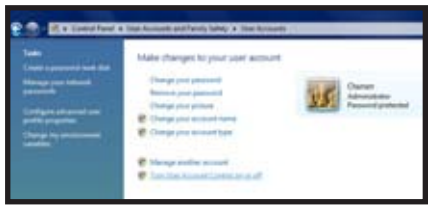


PICTURE 7-26

4. Select the desired user account.

PICTURE 7-27

5. Select **Turn User Account Control on or off**



PICTURE 7-28

6. Uncheck the box next to "Use User Account Control (UAC) to help protect your computer."

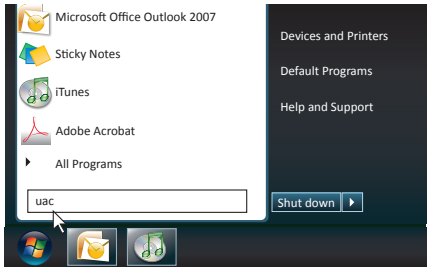
7. You will then be asked to restart your computer for the change to take effect.

PICTURE 7-29

**Windows 7**

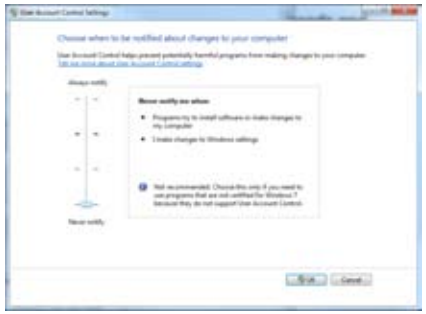
1. Open up the Start Menu (accessible by clicking on the Windows icon in the lower left of your screen.

2. Type "uac" into the search bar and hit **ENTER**. The User Account Control will open or you will be offered a link to click to open it.




PICTURE 7-30

3. Move slider to lowest setting and press **OK**.



PICTURE 7-31

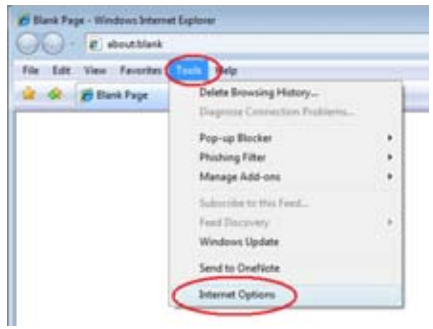


## SETTING UP ACTIVEX CONTROL

**STEP 1.** Open Internet Explorer

**STEP 2.** Click on **Tools**

**STEP 3.** Select **Internet Options** in the pull-down menu




PICTURE 7-32

**STEP 4.** Click on the **Security** Tab

**STEP 5.** Select **Trusted** Sites

**STEP 6.** Click on the **Sites** button

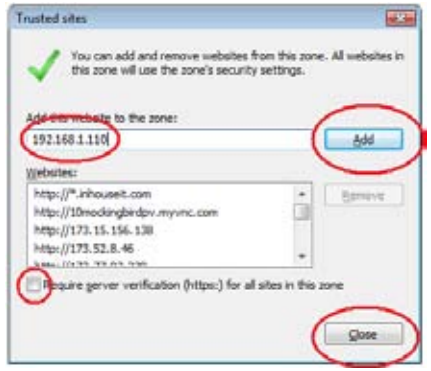
PICTURE 7-33

**STEP 7.** Uncheck the "**Require server verification (https:) for all sites in this zone**" button.

**STEP 8.** Type the DVR's IP address (obtained during **Network Setup**) or DDNS domain name into the "**Add this website to the zone:**" box.

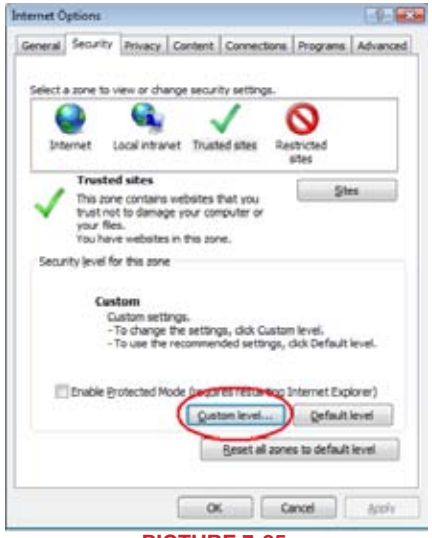
**STEP 9.** Click the **Add** button

**STEP 10.** Close the window.


Trusted sites
You can add and remove websites from this zone. All websites in this zone will use the zone's security settings.
Add this website to the zone:
192.168.1.110
Add
Websites:
Remove
Require server verification (https:) for all sites in this zone
Close

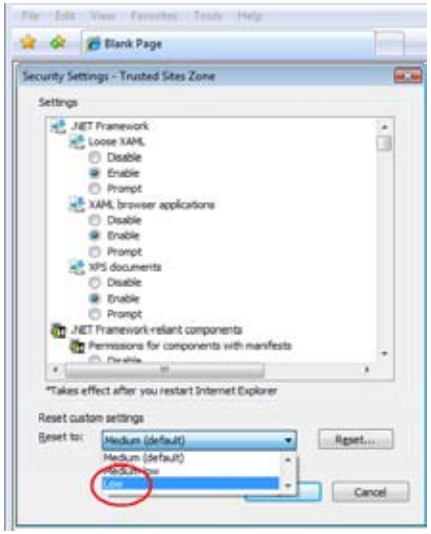
PICTURE 7-34

**STEP 11.** Click the **Custom level…** button.




PICTURE 7-35

**STEP 12.** Pull down the "**Reset to:**" menu button and select **Low**




PICTURE 7-36

**STEP 13.** Click the **Reset** button

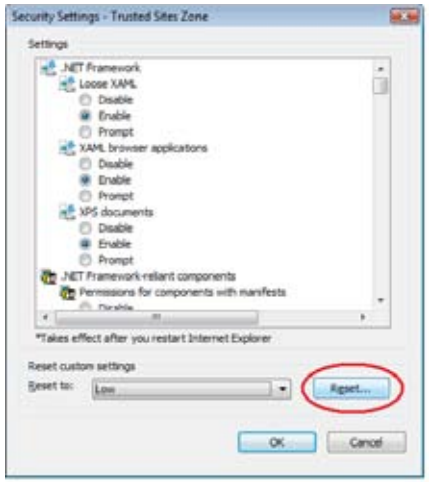
**STEP 14.** Click "**Yes**" when asked, "Are you sure you want to change the setting for this zone?"

**STEP 15.** Click **OK**

**STEP 16.** Click **Apply**

**STEP 17.** Click **OK**

**STEP 18.** Close Internet Explorer




PICTURE 7-37

## 7.6 USING THE REMOTE ACCESS SOFTWARE

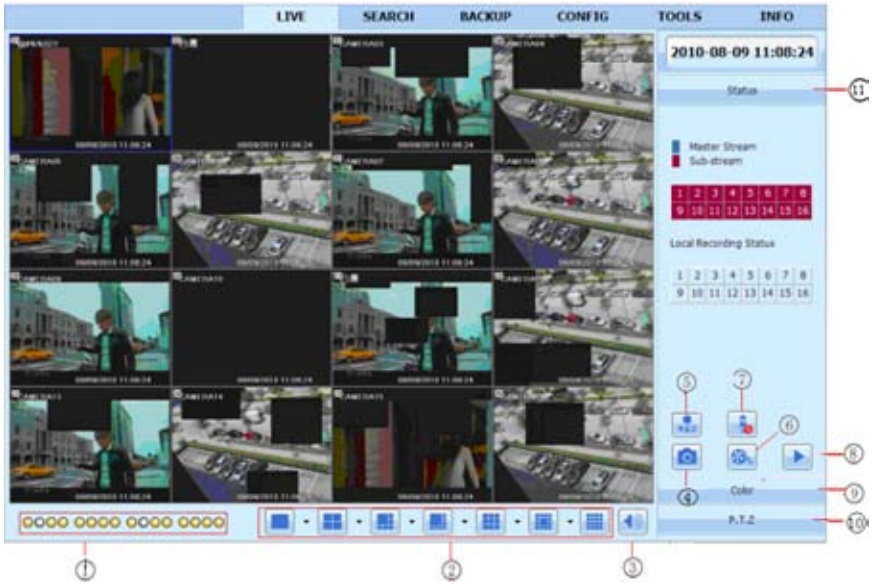
When you first connect to the DVR via Internet Explorer – whether from within the network or over the Internet – you will be prompted to download a webcam program to access the cameras with the following message in the information bar at the top of the page:

**This website wants to install the following add-on: 'WebClient.cab' from 'Digital Peripheral Solutions Ltd.'..."**

Click on the bar to accept this file and upon completion of the download you will be presented with a login window. Enter your User Name and Password that are stored on the DVR. You will then see a screen showing the camera views and controls.

The various functions available in this **Remote Live Viewer** are broken down by the tabs along the top of the window; **Live**, **Search**, **Backup**, **Config**, **Tools** and **Info**.

### LIVE VIEW




PICTURE 7-38

**Live Viewer symbol and function definitions:**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Channel Indicator | 2 | Screen Display Mode | 3 | Volume |
| 4 | Snap Picture | 5 | Start Manual Record | 6 | Client Record |
| 7 | Bidirectional Talk | 8 | Playback | 9 | Color |
| 10 | PTZ Control | 11 | Master/Sub Stream Status | | |

**Screen Display Mode**

Clicking on the arrow beside the screen display mode will open the **Channel Select** dialog which will allow you to specify which channels are shown. Channels can be selected individually or in blocks of four.

PICTURE 7-39

**Record and Playback Controls**

Buttons 4 through 8 shown in Picture 7-33 allow you to save real-time still and video images to your computer.

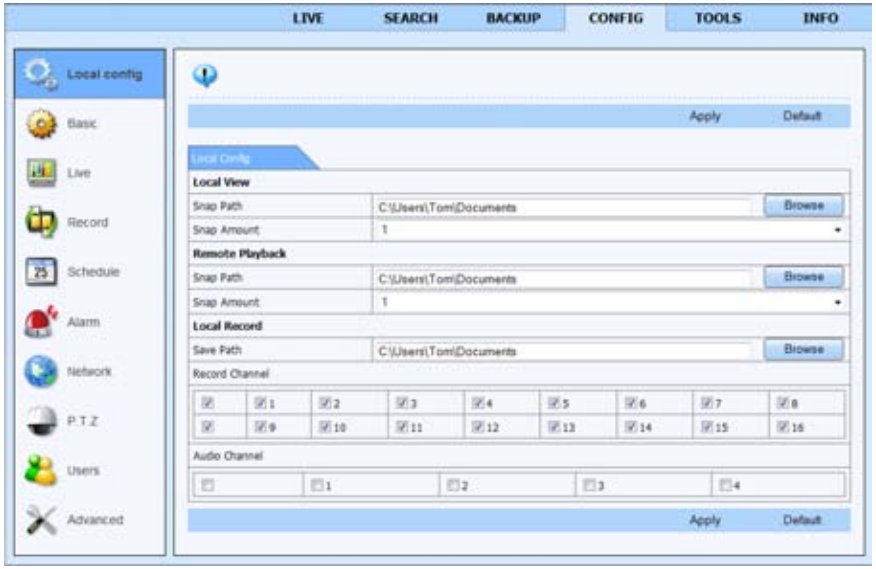
Clicking on the **Snap** icon will capture still images and save them to the computer.

**Record** will begin remote manual recording of all active channels onto your DVR.

**Client Record** will capture video and save it onto your computer's hard drive.

**Star Talk** allows you to communicate through any connected camera which also has a two-way audio feed. This optional equipment must be added before this feature is available.

**Local Playback** lets you review the Client Record video stored on your computer's hard drive.




PICTURE 7-40

The destination for the still images is set in the **Config** tab in the main menu at the top of the **Remote Live Viewer** (**See Section 7.7**) which will open the Local Config sub menu.

You can also set the number of images that are captured when the **Snap Pictures** button is pressed. This window is also used to set the destination for recordings made from within the **Remote Live Viewer** as well as how many audio channels (if available) are recorded in addition to which camera channels.

### Color Adjustment

Drag the slide bars to adjust Brightness, Contrast, Hue and Saturation. Clicking Default will return them to the original settings.

| Button | Description | Button | Description |
|---|---|---|---|
| | Brightness | | Hue |
| | Saturation | | Contrast |
| | Default | | Save settings |

### PTZ Control

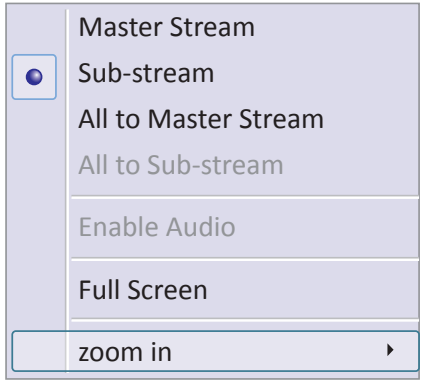
Selecting the **PTZ** button will bring up a control panel similar to that seen on the DVR. Users have the same level of control as they would at the DVR including activating pre-set commands and cruises as well as full manual control.

| Button | Function |
|---|---|
| | Move the dome horizontally, vertically and diagonally. The center square stops the movement. |
| | Adjusts the speed of the dome's rotation. |
| | Focus button. |
| | Zoom button. |
| | Iris button. Increase or decrease the light level of the image. |
| | Go to a preset |
| | Select and do auto cruise |
| | Track |
| | Auto scan |



### Master and Sub-Streams

Right-clicking on any live image will open up a pull-down menu. Changes made in this menu will be reflected in the **Master/Sub-Stream** status display on the right of the **Remote Live Preview** interface.




PICTURE 7-41

**Stream** – This DVR supports dual streaming – a master stream and a sub-stream. The master stream has a higher frame rate of a maximum of 30 frames per second for NTSC (25FPS for PAL) versus a maximum of 7 FPS for a sub-stream (6FPS for PAL) for every channel. For optimal performance, a network with increased bandwidth is recommended when attempting to remotely view multiple channels on the master stream.

**All to Master/Sub-Stream** – Sets all channels to master or sub-stream.

**Enable Audio** – Enables or disables audio feed.

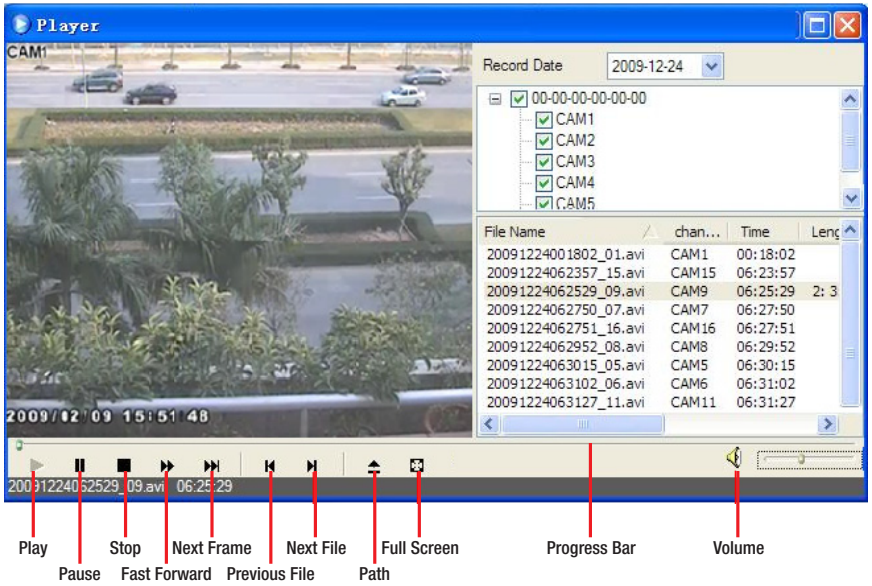
**Full Screen** – The selected live preview will display full screen. The tool bar will be hidden. Double-clicking or a right-click will resume the previous display.

**Zoom In** – Single-channel large screen amplification. Select **Zoom In** and then click on the image to amplify the image. Click and drag to move within the image. Double-clicking will exit this mode. Right-clicking will return to the main interface.

## 7.7 REMOTE PLAYBACK AND BACKUP

### REMOTE PLAYBACK

Clicking the **Playback** button (**Item 8 in Picture 7-38**) will bring up the **Player** window. Users can select the record date and channels. Double-click the file name in the record file list box and you can play back that file.




**PICTURE 7-42**

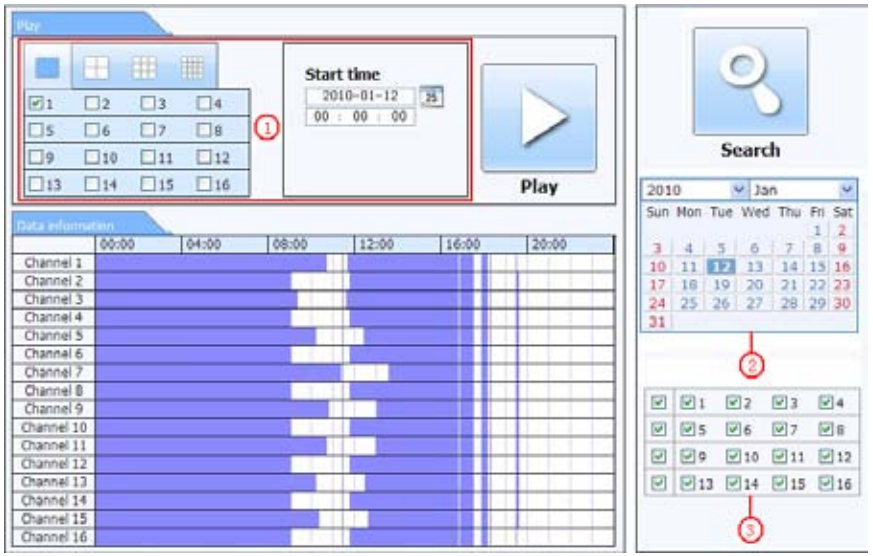
In addition to the control buttons, progress through the playback can be controlled using the slider in the progress bar.

### SEARCH

Clicking on the **Search** tab in the **Remote Live Viewer** will allow you to search by **Time**, **Event** or **File Management**.

#### Time Search

**STEP 1.** The user can select the display mode as well as the time and date to begin searching from in the area at the top of the **Search** window (**Red box listed as Item 1 in Picture 7.43**)




**PICTURE 7-43**

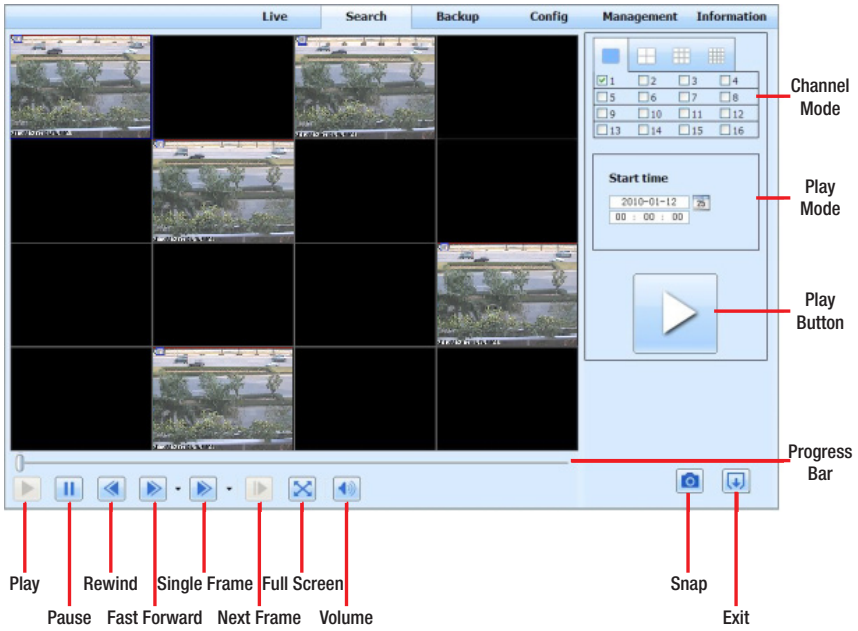
**STEP 2.** After running the search, available events will be displayed in the **Data Information** section.

**STEP 3.** A highlighted date in the **Calendar** (**Item 2 in Picture 7.43**) indicates that data was recorded on that date.

**STEP 4.** Select which channels' data to display (**Item 3 in Picture 7.43**)

**STEP 5.** Select an event from the **Data Information** list and click on the **Play** button to begin playback.

**STEP 6.** This will open a window with control buttons at the bottom. Control buttons at the bottom allow the user to move through the playback.

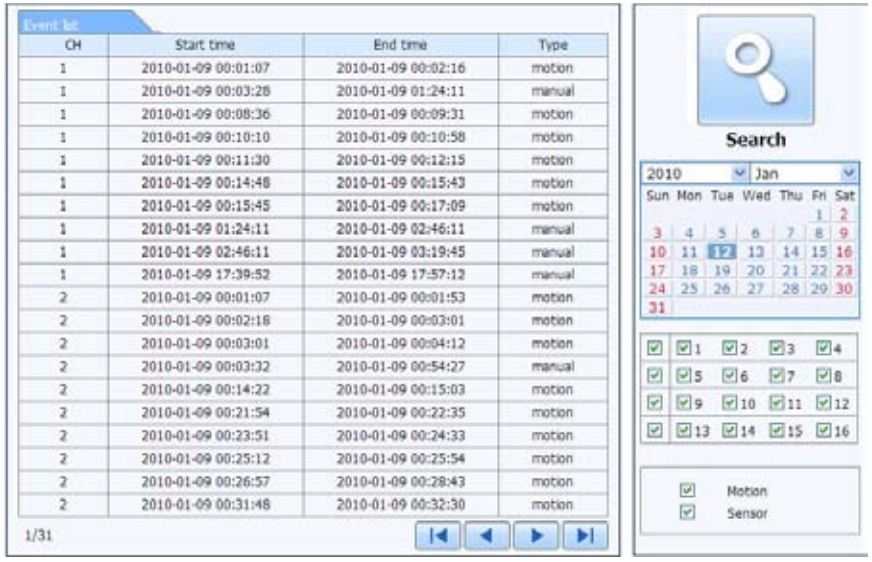



PICTURE 7-44

**STEP 7.** The **Snap** button allows you to take still images of specific recordings.

## Event Search

**STEP 1.** Click on the highlighted date, select recorded channels along with the type of event – motion or sensor. Then click **Search**.

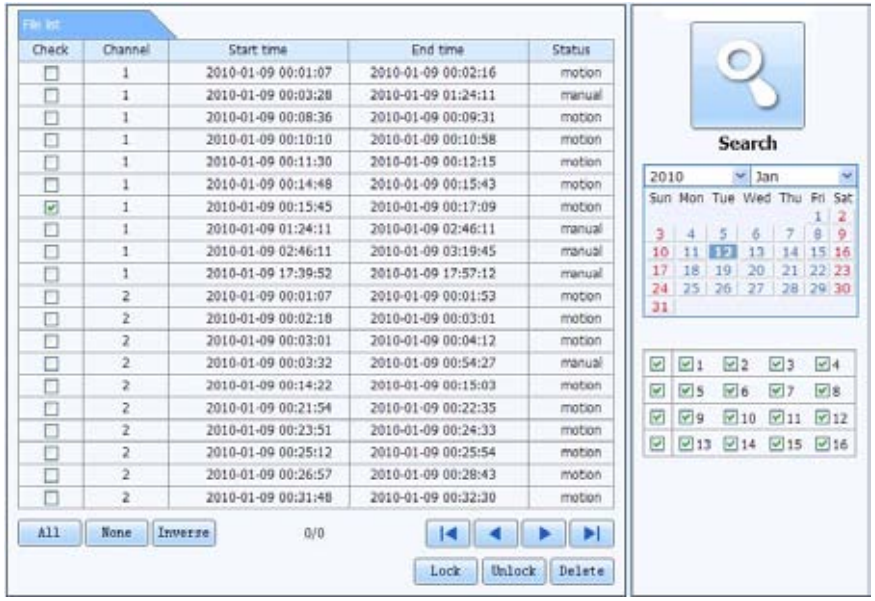



PICTURE 7-45

**STEP 2.** The list of recorded events will be displayed in the **Event List**. Double-click on an item to open the **Playback** window.

### File Management

This allows you to locate an event and **lock**, **unlock** or **delete** it from the record.




PICTURE 7-46

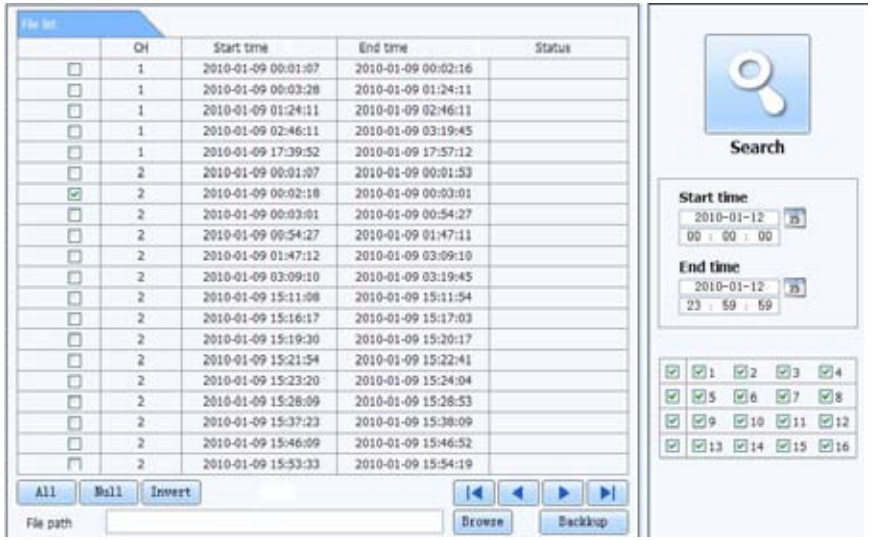
**Lock** – Select a recording from the File List box. Clicking the "Lock" button will protect the file from being overwritten or deleted except when the hard drive is reformatted.

**Unlock** – Unlocks a previously locked file.

**Delete** – Erases an unlocked file. If a file is locked, you must unlock it before it can be deleted.

### Remote Backup

Clicking on the **Backup** tab will open the **Backup** interface. This allows you to backup files from the DVR to your computer's hard drive.




PICTURE 7-47

**STEP 1.** Select channels, the start and end time, and then click the **Search** button. The search results will be shown in the **File List** box.

**STEP 2.** Select which files to back up by clicking on the appropriate box(es).

**STEP 3.** Click on the **Browse** button to set the destination for the saved files.

**STEP 4.** Click on **Backup** to begin the download.

## 7.8 REMOTE SYSTEM CONFIGURATION

Clicking on the **Config** tab in the Main Menu of the **Remote Live Viewer** will change the display to where the user can set-up or alter the operating parameters of the DVR. Available functions include the ability to configure; **Basic**, **Live**, **Record**, **Schedule**, **Alarm**, **Network**, **PTZ** and **User** settings. Select an item from the submenu on the left and the appropriate window will open to the right. While one user is changing settings, other users are blocked from doing so.

PICTURE 7-48

The list of available functions and their options are identical to those on the DVR. Please refer to **CHAPTER 4** of this manual, "**Main Menu Setup Guide**" for more details.

Be sure to click on **Apply** to save your settings before exiting any window. **Default** will restore the original settings.



# MOBILE SURVEILLANCE

CHAPTER 8

This DVR supports mobile surveillance on smart phones and other devices running Android, Blackberry,Symbian and Windows Mobile Pro operating systems along with the iPad and iPhone on 3G networks. To access the DVR from these devices you must have first configured the **Network Settings** on the DVR as shown in **SECTION 4.6**.

## 8.1 WINDOWS MOBILE PRO

Windows Mobile Pro 6.1 and 6.5

**STEP 1**. Activate mobile network access on the mobile phone.

**STEP 2.** Run Internet Explorer

**STEP 3.** Input the DVR's IP address or DDNS domain

**STEP 4.** You will be asked to download the software PCam. Click on the software name to open the download dialog pop-up

PICTURE 8-1

**STEP 5.** Click **Yes** to start downloading and installing.

PICTURE 8-2

**STEP 6.** PCam will open automatically once the install process is complete.

PICTURE 8-3

**STEP 7.** Input the DVR's address, ID and password respectively in the fields "**Server**", "**User**" and "**Password**". The User Name and Password are the same as used on the DVR. The default is ***admin*** and ***123456***. Click "**Go**" to log onto the DVR. Successful access will bring up the view from a camera.

PICTURE 8-4

**STEP 8.** Camera 1 is the default channel after login. To change the channel, use the drop-down **Channel** menu.

PICTURE 8-5



## 8.2 SYMBIAN

This DVR supports phones running versions 3 and 5 of the Symbian OS.

**STEP 1.** Enable network access on the mobile phone.

**STEP 2.** Launch the web browser

**STEP 3.** Input the DVR's IP address or DDNS domain name in a new bookmark. Click this bookmark to connect to the DVR.

PICTURE 8-6

**STEP 4.** A welcome window will open and prompt you to download a software package called SCam. Click on the software name to download.

**STEP 5.** Click Yes on the security pop-up window to confirm your download

**STEP 6.** The SCam shortcut icon will appear on the system menu when the download is complete.

PICTURE 8-7

**STEP 7.** Launch the SCam program. It will display a function interface:

**Live View** – Open mobile Live View.

**Image View** – To check pictures snapped in the Live View mode.

**System Setting** – Login setting and alarm setting

**Help** – Function indication and help.

PICTURE 8-8

**STEP 8.** In **System Setting**, select **Login Setting** to bring up the **Login** interface.

**STEP 9.** Input the DVR's address, User Name and Password then save. The User Name and Password are the same as used on the DVR. The default is ***admin*** and ***123456***.

**STEP 10.** The Access Point of "Winsock" is the default. This access point may differ outside North America or based on your cellular provider. Contact your provider's tech support department if you experience difficulties with this setting.

PICTURE 8-9

**STEP 11.** Open **Live View** to see the camera images.

PICTURE 8-10

**STEP 12.** In **Live View** you can take snapshot images, select other camera channels and control PTZ cameras.

PICTURE 8-11



## 8.3 APPLE IOS – IPHONE AND IPAD

This DVR supports connection on 3G networks. Non-3G equipped devices will need a Wi-Fi connection.

**NOTE!** Although the software needed to access your DVR is free, you will need to have or create an iTunes or App Store account to proceed.

### INSTALLING THROUGH THE IPHONE OR IPAD

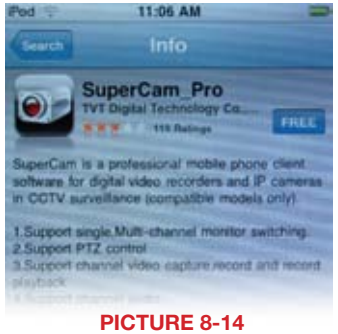
**STEP 1.** Open the App Store function on your device

PICTURE 8-12

**STEP 2.** Select the Search function and search for "SuperCam"

PICTURE 8-13

**STEP 3.** Click on SuperCam to open the introduction. Click on the **FREE** button and it will change to **INSTALL**. Click it again.


11:06 AM
Search
Info
SuperCam_Pro
FREE
SuperCam is a professional mobile phone client software for digital video recorders and IP cameras in CCTV surveillance (compatible models only)
1.Support single,Multi-channel monitor switching
2.Support PTZ control

PICTURE 8-14

11:06 AM
Info
SuperCam_Pro
TVT Digital Technology...
INSTALL
SuperCam is a professional mobile phone client software for digital video recorders and IP cameras in CCTV surveillance (compatible models only).
1.Support single,Multi-channel monitor switching.
2.Support PTZ control
3.Support channel video capture,record and record playback

PICTURE 8-15

**STEP 4.** Input your iTunes or App Store password and then click "**OK**". The software will be downloaded and installed automatically.

PICTURE 8-16

PICTURE 8-17

Instructions for operating SuperCam on your Apple mobile device can be found on **page 75**.



## INSTALLING THROUGH PC OR MACINTOSH COMPUTER

**STEP 1.** Access the **iTunes** store in your computer and login.

**STEP 2.** Connect your device to the computer.

**STEP 3.** Select the Search function and search for "SuperCam."

PICTURE 8-18

**STEP 4.** Click the "**Free Application**" button next to SuperCam_Pro. (**Red box in Picture 8-19**)

PICTURE 8-19

**STEP 5.** Input your Apple ID and password, then click "**Acquire**."

PICTURE 8-20

**STEP 6.** Check "**Synchronously Apply Program**" and "**SuperCam**" and then click the **Apply** button. Supercam will be installed automatically.

PICTURE 8-21

## OPERATING INSTRUCTIONS FOR IOS

**STEP 1.** Launch SuperCam. This will bring up the **Login** interface.

PICTURE 8-22

**STEP 2.** Input the DVR's IP address or DDNS domain name, User Name and Password. Check the "**Remember Server**" box to save this setting. The User Name and Password are the same as used on the DVR. The default is ***admin*** and ***123456***. If you are monitoring multiple devices, previously saved login data for these devices can be accessed using the ▼ button on the right.

### Main Menu

This window contains the function buttons needed to access and control your system.

PICTURE 8-23

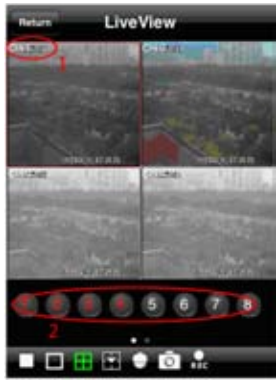
Clicking on the **help** icon will list the functions as well as how to use them. They are also defined below:

| Button | Function | Button | Function |
|---|---|---|---|
| Playback | Playback recorded files | Image | Image view |
| Log | Log record | Server List | Device list |
| Live | Live view | Settings | Software settings |
| Information | Device information view | Help | Software help center |
| Logoff | Logoff and return to login interface | | |



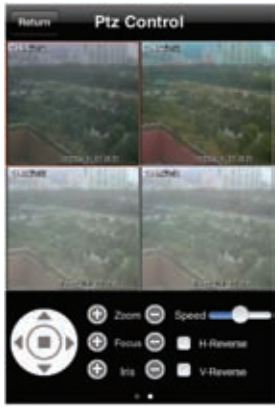
### Live View Interface

You can access the different viewing functions of the DVR in a similar manner to the controls on the DVR itself.




PICTURE 8-24

PICTURE 8-25




PICTURE 8-26

PICTURE 8-27

| Button | Function | Button | Function |
|---|---|---|---|
| | Switch channels | | Switches to PTZ interface |
| | Snap picture | REC | Record |
| | Close the video of the current channel | | Live Audio |
| | Switch to single image view | | Switch to 4-image view |
| | Move the dome horizontally and vertically. The center square stops the movement. | | Zoom In/Focus In/Iris Open |
| | | | Zoom Out/Focus Out/Iris Close |
| **Preset** | Select the preset point | | |
| **Group** | Set the cruise line | **Speed** | Rotate speed of the PTZ |
| **H-Reverse** | Inverts PTZ control (up is down) | **V-Reverse** | Inverts PTZ control (left is right) |

### Image View Interface

| Button | Function |
|---|---|
| ◀ | Previous picture |
| ▶ | Next picture |
| ⏮ | To first picture |
| ⏭ | To last picture |
| | Copy pictures to album |
| | Delete |

PICTURE 8-28

### Record Playback Interface

Clicking on a recorded file will start the playback. The controls at the bottom of the screen allow the user to move through the video.

| Button | Function |
|---|---|
| ▶ | Play |
| ⏸ | Pause |
| ■ | Stop |
| ◀◀ | Reverse |
| ▶▶ | Fast Forward |

PICTURE 8-29

### Server List Interface

This allows you to add, delete or modify the DVR connection or connections if you are remonitoring multiple systems.

| Button | Function |
|---|---|
| ☆ | Add a server |
| ☆ | Modify a server connection |
| ☆ | Delete a server |

PICTURE 8-30



### Configuration Interface

This window allows you to configure the main settings for how files are recorded and saved as well as how alerts are handled.

PICTURE 8-31

**Record file clip size** – This is the maximum size of a single video clip.

**Reserved disk space** – This is the amount of space reserved for video recordings on the internal memory. If the available disk space is less than that selected, the video will stop.

**Display mode** – Select between single or four-screen live display

**Remember display order** – The user can choose whether the phone remembers the display order or not.

**Alarm** – If turned on, this will trigger an audible alarm when a Video Loss, Sensor or Motion event occurs.

**Shake Alarm** – If turned on, this will cause the device to vibrate when a Video Loss, Sensor or Motion event occurs.

### Information View Interface

This presents information on the cell phone you are using the SuperCam software version on as well as the software itself.

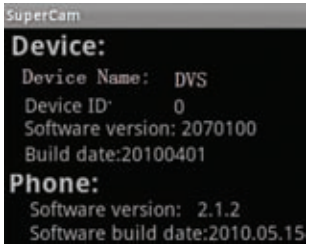
**Device ID:** This is the ID of the DVR you are connected to. This can be set on the DVR in the **System** tab shown in **SECTION 4.1**

**Software Version:** The current connection device software version

**Build Date:** The date the software was released

**Software Version:** The current version of the Apple iOS software in use on your phone

**Software Build Date:** The date this version of Apple iOS was released



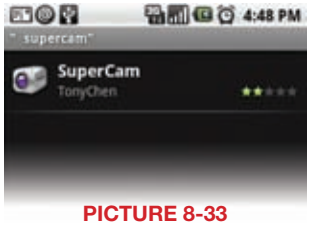

PICTURE 8-32

## 8.4 ANDROID

### SOFTWARE INSTALLATION

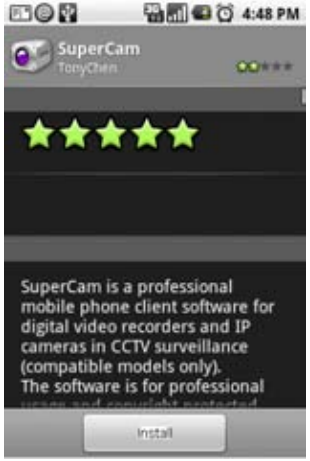
**STEP 1.** Enter the Android Market

**STEP 2.** Search for “SuperCam”



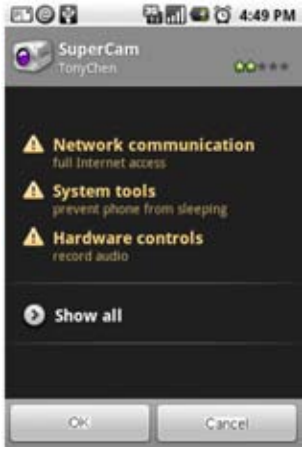

PICTURE 8-33

**STEP 3.** Click the **Install** button


4:48 PM
SuperCam
TonyChen
SuperCam is a professional mobile phone client software for digital video recorders and IP cameras in CCTV surveillance (compatible models only).
The software is for professional
Install

PICTURE 8-34

**STEP 4.** Click the **OK** button to confirm the download




PICTURE 8-35

**STEP 5.** You can view the download and installation process in Notifications. Once download is complete, the software will install automatically.

PICTURE 8-36

### OPERATING SUPERCAM

**Login**

**STEP 1.** Launch SuperCam. This will bring up the **Login** interface.

PICTURE 8-37

**STEP 2.** Input the DVR’s IP address or DDNS domain name, User Name and Password. Check the “**Remember Server**” box to save this setting. The User Name and Password are the same as used on the DVR. The default is ***admin*** and ***123456***. If you are monitoring multiple devices, previously saved login data for these devices can be accessed using the ▼ button on the right.

PICTURE 8-38

### Main Menu

This window contains the function buttons needed to access and control your system.

Clicking on the help icon will list the functions as well as how to use them. They are also defined below:

PICTURE 8-39

| Button | Function | Button | Function |
|---|---|---|---|
| Playback | Playback recorded files | Image | Image view |
| Log | Log record | Server List | Device list |
| Live | Live view | Settings | Software settings |
| Information | Device information view | Help | Software help center |
| Logoff | Logoff and return to login interface | | |

### Live View

In this display you can access the different viewing functions of the DVR in a similar manner to the controls on the DVR itself.

| Button | Function | Button | Function |
|---|---|---|---|
| | Switch channels | | Switches to PTZ interface |
| | Snap picture | REC | Record |
| | Talk | | Live Audio |
| | Full Screen | | Return |
| | Move the dome horizontally and vertically. The center square stops the movement. | | Zoom In/Focus In/Iris Open |
| | | | Zoom Out/Focus Out/Iris Close |
| **Preset** | Select the preset point | | |
| **Group** | Set the cruise line | **Speed** | Rotate speed of the PTZ |



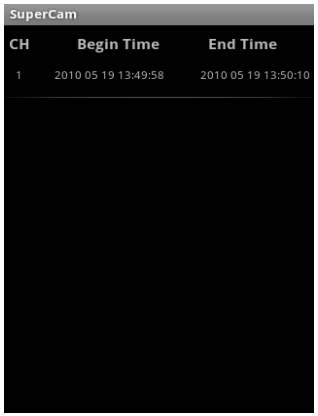
### Image View

| Button | Function |
|---|---|
| | Previous picture |
| | Next picture |
| | Zoom in |
| | Zoom out |
| | Delete |
| | Return |

PICTURE 8-40

### Record Playback

Clicking on a recorded file in the **Recorded File** window will start the playback.




PICTURE 8-41

The controls at the bottom of the screen allow the user to move through the video.

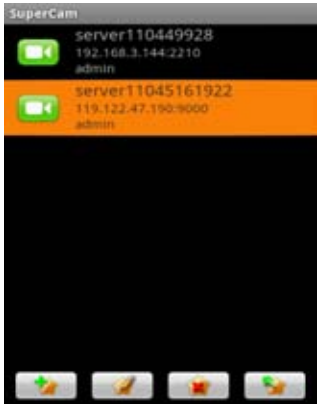
| Button | Function |
|---|---|
| | Play |
| | Pause |
| | Stop |
| | Full screen |
| | Return |

PICTURE 8-42

**Server List**

This allows you to add, delete or modify the DVR connection or connections if you are remotely monitoring multiple systems.

| Button | Function |
|---|---|
| ☆ | Add a server |
| ☆ | Modify a server connection |
| ☆ | Delete a server |
| ☆ | Return to Main Menu |




PICTURE 8-43

**Information View**

This presents information on the cell phone you are using the SuperCam software version on as well as the software itself.

**Device ID:** This is the ID of the DVR you are connected to. This can be set on the DVR in the **System** tab shown in **SECTION 4.1**

**Software Version:** The current connection device software version

**Build Date:** The date the software was released

**Software Version:** The current version of the Android software in use on your phone

**Software Build Date:** The date this version of Android was released

PICTURE 8-44

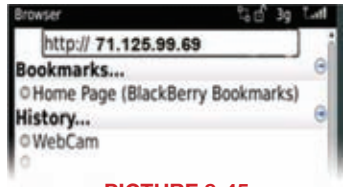


## 8.5 BLACKBERRY

The SuperCam software used to monitor your system from your phone is compatible with BlackBerry OS 4.5 or newer.

### SOFTWARE INSTALLATION

**STEP 1.** Open the browser on your BlackBerry phone and enter the public IP address or the DDNS domain name of your router to access the DVR.

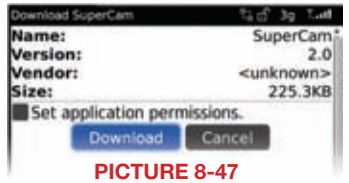



PICTURE 8-45

**STEP 2.** You will be prompted to download the SuperCam software. Click on the link to bring up the download window.

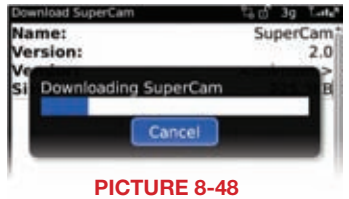
PICTURE 8-46

**STEP 3.** Click on the **Download** button to begin the download. The progress of the download will be displayed.




PICTURE 8-47

**STEP 4.** The software will be installed automatically.




PICTURE 8-48

PICTURE 8-49

If the software fails to download, please check the following:

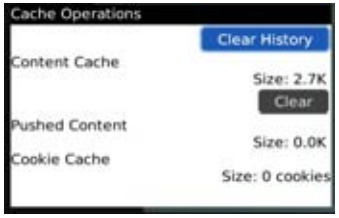
- Verify that you have a good connection to your cellular network
- Verify that you can access the DVR from a remote computer
- Modify your BlackBerry's browser configuration:

**STEP 1.** Open your **Options** menu from the **Menu**

**STEP 2.** Open **Browser Configuration** and check the boxes to allow JavaScript Support and JavaScript pop-ups, along with enabling the browser to terminate slow-running scripts, use background images and support embedded media.

PICTURE 8-50

**STEP 3.** Then, from the **Options** menu, select **Cache Operations** and click on "**Clear History**" to empty the browser cache.




PICTURE 8-51

There may be a compatibility problem with SuperCam software running on mobile phones with touch screens. The following steps will resolve this issue:

Step 1. Open the **Options Menu**

Step 2. Select **Advanced Options**

Step 3. Select **Applications**

Step 4. Select **SuperCam**

Step 5. Click on **Disable Compatiblity**

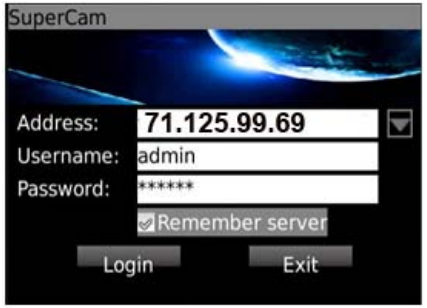


## OPERATING SUPERCAM

### Login

**STEP 1.** Launch SuperCam. This will bring up the **Login** interface.

**STEP 2.** Input the DVR's IP address or DDNS domain name, User Name and Password. Check the "**Remember Server**" box to save this setting. The User Name and Password are the same as used on the DVR. The default is ***admin*** and ***123456***. If you are monitoring multiple devices, previously saved login data for these devices can be accessed using the button on the right.




PICTURE 8-52

### Main Menu

This window contains the function buttons needed to access and control your system.

PICTURE 8-53

| Button | Function | Button | Function |
|---|---|---|---|
| Image | Image View | Log | Record log |
| Server List | Device list | Settings | Software settings |
| Live | Live view | Information | Device information view |
| Help | Software help center | Logoff | Logoff and return to login interface |

### Live View

In this display you can access the different viewing functions of the DVR in a similar manner to the controls on the DVR itself.

PICTURE 8-54

PICTURE 8-55

PICTURE 8-56

PICTURE 8-57

| Button | Function | Button | Function |
|---|---|---|---|
| | Switch channels | | Switches to PTZ interface |
| | Snap picture | | Full Screen |
| | Background alarm | | |
| | Move the dome horizontally and vertically. The center square stops the movement. | | Zoom In/Focus In/Iris Open |
| | | | Zoom Out/Focus Out/Iris Close |
| Preset | Select the preset point | Group | Set the cruise line |

### Server List

This allows you to add, delete or modify the DVR connection or connections if you are remotely monitoring multiple systems.

**Add** – Add a DVR's IP address or DDNS domain name

**Modify** – Modify a DVR's IP address or DDNS domain name

**Delete** – Remove a DVR's IP address or DDNS domain name

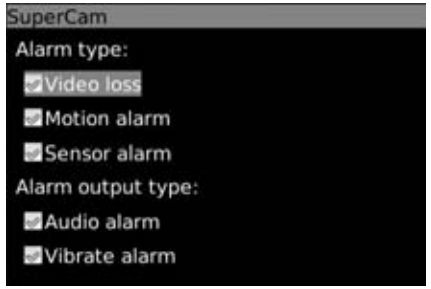
PICTURE 8-58

### Settings

Configure which alarms will activate and what will trigger them.

**Alarm Type** – Choose which alarm types you want to be notified about.

**Alarm Output Type** – Choose whether the phone alerts you with an audio or vibratory alarm or a combination of both.




PICTURE 8-59

### Information View

This presents information on the cell phone you are using the SuperCam software version on as well as the software itself.

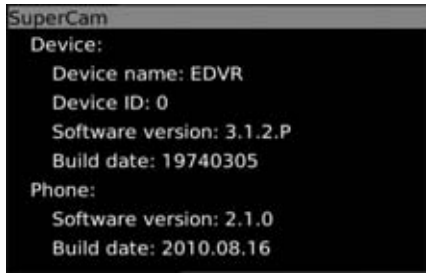
**Device ID:** This is the ID of the DVR you are connected to. This can be set on the DVR in the **System** tab shown in **SECTION 4.1**

**Software Version:** The current connection device software version

**Build Date:** The date the software was released

**Software Version:** The current version of the BlackBerry software in use on your phone

**Software Build Date:** The date this version of BlackBerry was released




PICTURE 8-60

# HARD DISK DRIVE

CHAPTER 9

Your DVR uses a standard SATA (Serial Advanced Technology Attachment) hard disk drive and will support drives up to 2TB (terabytes). These drives are the current industry standard and may be purchased wherever computer parts are sold. Depending on where you purchased your DVR, your hard drive may already be installed. But, we recognize that you may wish to upgrade or replace your drive in the future so this DVR is designed to make installation and replacement easy for the average user.

It should be noted that while this is the only user-serviceable part within the case and you will not void your warranty by installing or upgrading your hard disk drive, care must be taken to avoid damage to the other components within the case.

**WARNING! ELECTRIC SHOCK RISK!**

The DVR **MUST** be unplugged from all power sources as well as from the cameras before opening the case. Failure to do so can result in damage to the DVR or its components as well as injury or death.

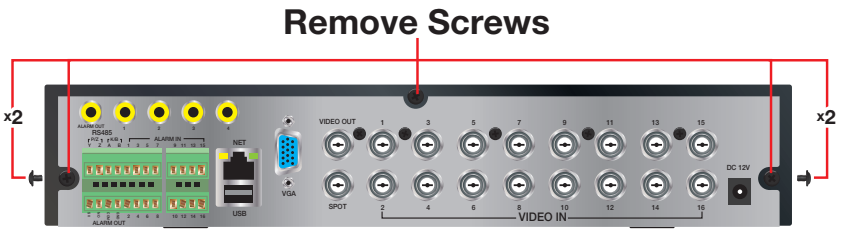
## 9.1 INSTALLATION/REMOVAL

It is strongly advised against opening the case when atmospheric conditions present the risk of static discharge which can damage electronic components.

Whether installing the drive for the first time or removing the old one to install a new one, the steps are largely the same:

**STEP 1**. Disconnect the DVR from the power source as well as any other connections.

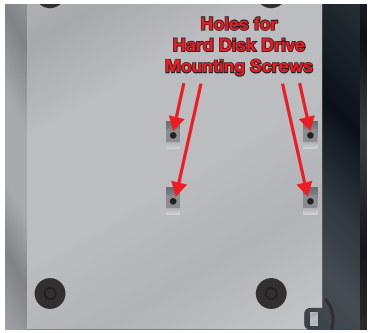
**STEP 2**. Remove seven screws as indicated in **Picture 9-1**




PICTURE 9-1

**STEP 3**. Remove the case by sliding it backwards and then lifting off.

**STEP 3A**. If removing a hard drive, you will need to unscrew the four drive mounting screws at the bottom of the DVR.

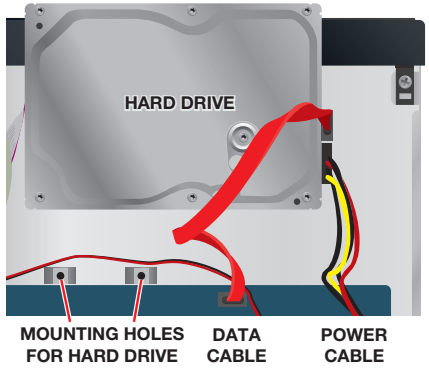



PICTURE 9-2

**STEP 4**. Connect the power and data cables. Press firmly, but do not force them onto the pins or you may damage them. The connectors are "keyed" to ensure they are connected in the proper position.

**STEP 5.** Attach hard drive to the base of the DVR with screws using the four mounting holes.

**STEP 6.** Replace the DVR cover and secure.




PICTURE 9-3

## 9.2 COMPATIBLE HARD DISK DRIVES

The following brands of hard drives have been tested for compatibility with this DVR.

| BRAND | CAPACITY |
|---|---|
| SSK | 512MB, 1G, 2GB |
| NETAC | 4GB |
| KINGSTON | 2GB |
| AIGO | 2GB |
| SMATTER VIDER | 1GB |
| SANDISK | 4GB |

## 9.3 CALCULATING THE RECORDING CAPACITY OF A HARD DISK DRIVE

While the physical data capacity of a hard drive is fixed, how much video you can record upon it depends on your recording configurations. Higher quality recordings will take up more space on the drive and setting the DVR to record for more frequently will fill it up more rapidly.

To determine the optimal capacity for your purposes, the chart below to estimate the size of hard drive that you'll need.

| VIDEO FORMAT | RESOLUTION | FRAME RATE (FPS) | VIDEO QUALITY | BIT RATE (kbps) | SPACE USED (MB/h) |
|---|---|---|---|---|---|
| NTSC | CIF | 30 | Highest | 1M | 465 |
| | | | Higher | 768k | 297 |
| | | | Medium | 512k | 230 |
| | | | Low | 384k | 173 |
| | | | Lower | 256k | 115 |
| | | | Lowest | 128k | 56 |
| | D1 | | Highest | 2M | 910 |
| | | | Higher | 1.5M | 712 |
| | | | Medium | 1M | 468 |
| | | | Lower | 768K | 297 |
| | | | Lowest | 512K | 241 |
| PAL | CIF | 25 | Highest | 1M | 466 |
| | | | Higher | 768k | 295 |
| | | | Medium | 512k | 235 |
| | | | Low | 384k | 175 |
| | | | Lower | 256k | 112 |
| | | | Lowest | 128k | 56.4 |
| | D1 | | Highest | 2M | 915 |
| | | | Higher | 1.5M | 700 |
| | | | Medium | 1M | 465 |
| | | | Lower | 768K | 297 |
| | | | Lowest | 512K | 241 |

The formula for calculating the required disk space is:

**Total Recording Capacity = Used space per hour (MB/h) x Recording time (hour) x number of channels**

Example: A customer is using the NTSC format (30 frames per second), CIF resolution with video quality set to Lowest and a total of 16 Channels. He wants the unit to record continuously for a month. Therefore, the calculation will look like this:

**56(MB/h), x 24 (hours/day) x 30 (days) x 16 (channels) = 645,120MB or 650GB**

Installing a 750GB SATA hard drive should provide enough space for one month's continuous recording time at those settings.



# APPENDIX

## A.1 TROUBLESHOOTING

**1. The DVR does not start after connecting the power, what is wrong?**

a. The power adapter may have been damaged, or is not providing enough power. Please change the adapter.
b. The DVR may not be getting enough power from the outlet or surge protector it is attached to.
c. There could be a problem with the system board on the DVR

**2. The indicator lights of the DVR are on, but no output. Why?**

a. The power adapter may have been damaged, or is not providing enough power. Please change the adapter
b. The video format of the DVR is different from that of the monitor.
c. Connection problem. Please check the cable and the ports of the monitor and DVR.

**3. Why are no images displayed on some or all of the channels of the DVR?**

a. Connection problem. Please check the cables and the ports of camera and DVR.
b. Camera problem. Please check the cameras by attaching them directly to TV or working port on DVR.
c. The video format (NTSC/PAL) of the DVR is different from that of the cameras. Please change DVR video format.

**4. The DVR cannot find the hard disk drive.**

a. The power adapter is not providing enough power, or the adapter is not getting enough power from the outlet
b. Connection problem. Please check the power and data cables on the HDD.
c. The HDD is damaged and will need to be replaced.

**5. I cannot record, what could be the problem?**

a. The HDD is not formatted. Please format it manually first.
b. The record function is not enabled or setup correctly. Please refer to **Section 4.3 Record Configuration**.
c. The HDD is full and recycle function is not enabled. Please refer to **Section 4.3 Record Configuration** and the **Recycle Record Tab** in the **Record Menu**.
d. The HDD is damaged and will need to be replaced.

**6. I cannot use the mouse, what could be the problem?**

a. Wait 5 minutes after connecting the mouse and then try again.
b. The mouse is not securely connected. Plug/unplug several times.
c. The mouse is incompatible with the system. Please try another mouse.

**7 What can I do when the DVR starts and displays "please wait……"all the time?**

a. First possible reason: hard drive power cable and/or data cable are not securely connected.
**Solution:** Please check the cable connections and make sure they are secure; if still not working, please unplug them and then plug them in again.
b. Second possible reason: The system is having problems reading the hard drive.
**Solution:** Try reformatting the current drive or re-placing it.

**8. Why isn't the mouse I have plugged into the front USB port working?**

The front USB port is only for backup to USB flash drive, and does not support a USB mouse. Please use the USB port on the rear panel if using a mouse.

**9. How do I input letters and numbers?**

To input letters (such as passwords) and numbers click the box behind where text is to be entered, and then a small keyboard will appear. Please select number or letter to input (the default password is ***123456***), or you can use the digital keys on the front panel, or the digital keys on the remote control.

PICTURE A-1

**10. How do I upgrade the firmware on the DVR?**

After you download the new firmware from the Q-See website at ***www.q-see.com***, copy it onto a USB flash drive. Then select **Upgrade** in the menu.

**WARNING!** Do not turn the system power off during the upgrade process! Doing so may damage the chipset and prevent the DVR from starting.

**11. I can get a live image on the display but I can't get the menu to display. How can I pull up the menu?**

Hold down the **ESC** key to wait for login dialog box to appear.

**12. I hooked the DVR up to a TV through the BNC video out port and I do not see anything on the screen. How do I get the video to display?**

By default the DVR is setup to use a VGA monitor, if you want to use a TV instead then push the ESC button on the front panel and hold it until you hear a beep, if you still do not get a display then hold the ESC button down again until you hear a beep, the display should come up.

**13. What is the minimum configuration of a PC for remote connection?**

| COMPONENT | MINIMUM REQUIRED |
|---|---|
| CPU | Intel Celeron 2.4G |
| MOTHERBOARD | Intel 845 |
| HDD | 80G |
| RAM | 512M |
| VGA | NVIDIA GeForce MX440/FX5200 ATIRADEON 7500/X300 |
| OS | Windows 2000(SP4 above) / Windows XP(SP2 above) /VISTA/Win7 |
| DIRECTX | 9.0 |



14. What are the PC configurations for 16-ch real time access with fully open mainstream channel?

| PC MODULE | PARAMATERS |
|---|---|
| CPU | Intel Core(TM)2 Duo CPU E4600 |
| MOTHERBOARD | G41/P41 chip |
| HDD | 80G |
| RAM | 1GB |
| VGA | GMA3100/NVIDIA GeForce 8400/ ATI RADEON HD3450 |
| OS | Windows 2000(SP4 above) /Windows XP(SP2 above)/ VISTA/Win7 |
| DIRECTX | 9.0 |

15. On Vista and Win7 I am getting an error message that Codec can't be installed or is missing, how do I solve that?

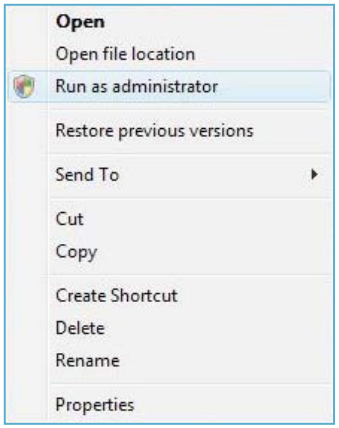
There are two ways to fix it:

a. In Windows, go to your **Control Panel** select **User Account and Family Safety** and then choose **User Account Control**.
Click **Turn User Account On or Off**. Uncheck the box next to **Use User Account Control (UAC) to help protect your computer**.

« Turn User Acco...
Search
Turn on User Account Control (UAC) to make your computer more secure
User Account Control (UAC) can help prevent unauthorized changes to your computer. We recommend that you leave UAC turned on to help protect your computer.
Use User Account Control (UAC) to help protect your computer
OK
Cancel

PICTURE A-2

b. Right-click on an Internet Explorer browser window. Select **Run as Administrator** to run browser.




PICTURE A-3

APPENDIX

# Q-SEE PRODUCT WARRANTY

Q-See is proud to back all of our products with a conditional service warranty covering all hardware for 12 months from the date of purchase. Additionally, our products also come with a free exchange policy that covers all manufacturing defects for one month from the date of purchase. Permanent upgrading service is provided for the software.

**Liability Exclusions:**

Any product malfunction or abnormalities in operation or damage caused by the following reasons are not within the free service scope of our company:

1. Equipment damage caused by improper operation.
2. Improper equipment operation environment and conditions (e.g., improper power, extreme environmental temperatures, humidity, lightning and sudden surges of electricity).
3. Damage caused by acts of nature (e.g., earthquake, fire, etc).
4. Equipment damage caused by the maintenance of personnel not authorized by Q-See.
5. Product sold over 12 months ago.

In order to fulfill the terms of your warranty, you must complete the registration process after purchasing our product. To do this, simply fill out the User's Information Card on our website at www.Q-See.com

## QUESTIONS OR COMMENTS? CONTACT US

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Anaheim, CA 92807

### FAX
714-998-3509

### WEBSITE
www.Q-See.com

### PRODUCT SUPPORT, DOWNLOADS, FIRMWARE UPDATES & MANUALS
www.Q-See.com

### CUSTOMER SERVICE
**Live Chat at www.Q-See.com (M-F, 8-5 PST)**
Email: cs@dpsi-usa.com
Phone: 877-998-3440 x 538 (M-F, 8-5 PST)

### GENERAL TECH SUPPORT
**Live Chat at www.Q-See.com (M-F, 8:30-5 PST)**
Email: ts@dpsi-usa.com
Phone: 877-998-3440 x 539 (M-F, 8:30-5 PST)

### REMOTE MONITORING SUPPORT
**Live Chat at www.Q-See.com (M-F, 8:30-5 PST)**
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